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ABSTRACT

During 1985-1986, 18 countries in the Asia and Pacific region undertook a survey of their teacher education programs. These survey studies provided statistical data and information, as well as details of trends and developments in teacher education, and were the subject of a workshop sponsored by Unesco's Asia and the Pacific Programme of Educational Innovation for Development (APEID). A review is presented of national studies reported by Australia, China, India, Indonesia, Japan, the Republic of Korea, Malaysia, Maldives, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Samoa, Sri Lanka, and Thailand. This publication assesses the progress that has been made in these countries in widening and developing teacher education in the region. It also considers directions for the future that will ensure the development of new competencies, attitudes, and orientations required in education. A new regional plan of action is discussed and suggestions are made for future actions at national and intercountry levels. The survey questionnaire is appended. (JD)

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Asia and the Pacific Programme of Educational Innovation for Development

APEID

Teacher Education

ISSUES, NEEDS AND PLANS FOR ACTION

U.S. DEPARTMENT OF EDUCATION

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PREFACE

A Regional Workshop on Teacher Education was organized by UNESCO Regional Office for Education in Asia and the Pacific (ROEAP), Bangkok, under the Asia and Pacific Programme of Education of Development (APEID), in collaboration with the Centre for Education, University of Tasmania, Hobart, Tasmania, with the assistance of the Australian National Commission for UNESCO from 4 to 10 December 1986. The Regional Workshop was attended by personnel responsible for, and involved in, the development of teacher education in sixteen countries, namely, Australia, China, India, Indonesia, Japan, the Republic of Korea, Malaysia, Maldives, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Samoa, Sri Lanka and Thailand.

During 1985-1986, eighteen (18) countries in the Asia and Pacific Region undertook a survey of their teacher education programmes. These survey studies provided statistical data and information, as well as details of trends and developments in teacher education. The studies from the countries of the Workshop participants were used as a basis for the procedures and deliberations of the Workshop.

During the first plenary session, each participant presented a ten-minute summary of the survey of needs in teacher education in their country. Participants then formed five working groups, with a rapporteur being present in each group. All groups were asked to develop, firstly, a summary of current innovations in teacher education in their countries. The purpose of this was to enable an inventory of such innovations to be compiled for the region. Secondly, each group was asked to identify, using the country surveys and their summaries, the issues in teacher education which should be the focus of the remainder of the Workshop.

At the second plenary session, each group reported on both the innovations and issues in teacher education identified by their group. After discussion a set of issues was decided upon, and separate sets of issues were allocated to each working group. Each group then considered this set of issues, their implied needs and possible future action to meet these needs. During the third plenary session, each group reported on the above. After discussion, groups were given the opportunity to review and modify these reports. The synthesis of these reports was then undertaken by the rapporteurs.

This publication takes stock of the progress that has been made in countries in the region in widening and developing teacher education in the region. It also considers the directions for future development which will ensure the development of new competencies, attitudes and orientations required in education. Finally the publication develops a regional plan of action, and makes suggestions for future actions at national and inter-country levels for the fourth cycle of APEID.

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Chapter One

INTRODUCTION

Training of educational personnel has been a programme area of APEID during all three programming cycles. In the first cycle, activities concentrated on th promotion of innovations with a view to orienting teacher education programmes towards national development goals and promoting basic functional education needed to achieve these goals. Preparing teachers for rural development was a major emphasis.

The second cycle of activities was focused on strengthening and building national initiatives, through alternative structures in teacher education, for meeting the demands of teachers are educational personnel from emerging national needs and the expansion of education systems. This resulted in guidelines and training materials being developed to support the new structures, methods and curriculum contents, and to ensure continuing personal growth in teacher education.

During the third cycle, the major emphasis has been on the implications of social and technological changes for education systems, and identifying the implications of such changes for the professional competence and skills of teachers. These activities have resulted in the development of "personnel profiles" for a variety of educational personnel. This has beeen followed by identifying competencies and skills which need to be developed for various educational personnel, including primary teachers, teacher educators, curriculum developers, educational media specialists and school and educational administrators. Another set of activities has promoted innovations through developing 'networks of institutions' for the in-service training of teachers and educational personnel, including teacher educators and trainees. Experience gained from existing innovative networks has been analysed, and emerging roles and tasks, and expected new competencies of the heads of such structures, have been identified.

The third major innovation which has been promoted is the development of distance education, including distance learning structures, and systems for both school education and teacher training. In this case, particular attention has been paid to the training of the staff of distance education centres for which training manuals and materials have been developed.

As the education systems in the participating countries are undergoing rapidly enormous changes, and an even more fundamental reorientation is being planned for the future, the focus of the activities in the third cycle has shifted to professional support services and the training of educational personnel at all levels. The main aim of activities in this area has been the strengthening of structures, and the organization and methods of preparing and updating staff competencies, to meet changing needs, and provide professional support based on educational research.

Hence, the activities have been concentrated on promoting the professional competence of teachers, and other educational personnel, through development of institutional facilities and services, new skills and attitudes through personnel profiles, emphasizing professional support services, and the training and continuing education of all the educational personnel. The several activities which directly led to a Regional Meeting, related to the above, were:

a) A Regional Design Meeting on preparing personnel profiles and training programme content, materials and evaluation procedures which was organized in Bangkok, in 1982. The participants reviewed the major ongoing technical and social changes, and explored their interaction with the education systems, taking into account the developments in the field of communication technologies, pedagogical science and innovation in management. The meeting made suggestions for redesigning educational structures and for qualification profiles of educational personnel.

   This was followed by a series of national studies during 1983, by the participating countries, for developing personnel profiles for different categories of educational personnel.

b) A Sub-regional Training Workshop on the preparation of personnel profiles was then organized in the Philippines. The Workshop reviewed the outcomes of earlier national studies on preparation of personnel profiles and developed a manual on training methods and techniques.

c) A Sub-regional Training Workshop on the In-Service Training of Educational Personnel which was organized in Australia (1984), reviewed national papers relating to training of educational personnel and made suggestions on professional development of educational personnel. The Workshop produced a final trial edition of the training manual on training methods and techniques.

d) A Regional Workshop on Application of Research Findings to improve Teaching Practice, with particular reference to new models of in-service education, was organized in the Republic of Korea, 1983. Participants developed guidelines for improvement of teaching/learning practices through the application of research, and suggested exemplars of new forms for the application of research.

e) A Regional Technical Working Group/Training Workshop on In-service Training of Educational Personnel which was organized in Thailand, reviewed the development of teacher training objectives in relation to achievement level of children of primary grades, participants also reviewed the development of national plans and practices for the in-service training of teachers for effectively dealing with the problems of drop-out and under-achievement, and developed strategies for the in-service training of educational personnel.

Another important innovation which has been promoted is the development of "distance learning structures and systems", both for school education and teacher training, and with particular attention to the training of staff of distance education centres for which training manuals and training materials have been developed. The activities which relate to these distance education initiatives were:

a) A Sub-regional Seminar on the Further Training of National Officials and Specialists in Distance Education which was organized in Pakistan in 1983, reviewed the problems and issues in distance education personnel, specified the learning needs of area categories of personnel, developed training designs, and prepared draft plans for follow-up national workshops.

b) A Sub-regional Workshop on Distance Learning Systems and Structures for Training of National Officials and Specialists which was organized in Sri Lanka in 1984, examined the functions of distance education systems and structures at the secondary level, and the critical training needs of the staff responsible for distance education. It appraised training strategies and methodologies currently in use, and suggested the development of national training plans for the pre-service and continuing education of the staff of these structures. The meeting also developed exemplar materials for use by countries in follow-up pilot national training workshops.

c) A Study Group Meeting on Evaluation of Distance Learning Projects under APEID was organized in China. Participants evaluated distance learning projects undertaken under APEID, as a basis for the further development of distance learning systems and structures and the further development of exemplar materials and tools for the evaluation of distance learning programmes.

In order to obtain information from the countries concerning:

(i) the extent to which changes have taken place in teacher education;

(ii) specific development trends and processes in teacher education;

(iii) significant growth points and gaps;

(iv) the future direction and actions needed at national and inter-country level;

the UNESCO Regional Office, in 1985, convened a small joint working group representing Asia and the Pacific to prepare a survey questionnaire on teacher education.

The survey questionnaire prepared by the joint preparatory working group was sent to the Member States during 1985-1986. Eighteen countries agreed to undertake a survey of their teacher education programmes and submit reports of the survey studies.

These survey studies expect not only to provide information regarding trends and developments in teacher education in the countries, but also the necessary structural data, and other information, which would help formulate important government policy decisions.

The survey instrument used is given in the Annex.

The major current innovations in teacher education resulting from these three cycles of APEID activities, have been listed in Chapter Four of this report.

These have been categorized as follows:

a) Pre-service teacher education;
b) Teacher recruitment;
c) Teacher induction;
d) In-service teacher education;
e) Special teacher education programmes;
f) Policy changes in teacher education;
g) Structural changes in, and between, teacher education institutions; and
h) Research in teacher education.

The range and variety of innovations listed in Chapter Four demonstrates the vitality and effectiveness, at national, inter-country and regional levels, of the APEID programme cycles.

Evaluation of APEID's performance and contributions in respect of teacher training and professional development programmes during the 10th Regional Consultation Meeting on APEID (RCM) in May 1986, by the TPR, combined with a major evaluation exercise carried out by two evaluation teams which visited six member countries in the region, reveals: that all the countries have indicated the objectives for this area have been achieved a considerable extent. This programme area has been considered as highly favourable by all the member countries.

Evaluation of this area further reveals: that the most effective activities quoted in the country responses vary from country to country. Such activities, which were noted as extremely useful are for example; Regional Workshop on Application of Research Findings for Improvement of Teaching/Learning Practices, (Korea); advanced level workshops on retraining of primary education personnel to cope with drop-out and repetition problems (Bangladesh, India, Nepal, Pakistan, Philippines, Sri Lanka, Viet Nam and Thailand, 1984-1985); the Sub-regional Training Workshop on Personnel Profiles and Training Plans, Content, Materials and Evaluation, (Philippines); the Regional Technical Working Group cum Training Workshop on In-service Training of Educational Personnel (Thailand); National Workshops on Microteaching for Teacher Educators and Administrators of the TTC and TTIS (NIEAER, Bangladesh, 1985); and attachments and internships programmes.

Teacher training and professional development programmes may have to address themselves, particularly to establishing new competencies to increase national capacities to respond to change. Special approaches in teacher education

should be developed to cater for immediately important issues identified in teacher education and other programme activities of APEID.

In summary, the above evaluation indicated that continuing emphasis should be placed on helping teachers and other educational personnel to play their roles effectively, through special approaches and methods of teacher training and training of educational personnel, with emphasis on coping with the problems involved in UPE, such as drop-outs and under-achievement, teaching in rural areas, teaching of moral education, application of technology in education and international understanding and co-operation.

A particular emphasis during these three cycles has been the changing roles of teachers resulting from the various innovative programmes. The changes considered necessary in the role of the teacher will be of considerable influence in the planning of the fourth cycle of APEID activities. For this reason working groups considered the role of the teacher. The following is a synthesis of these considerations.

Role of the teacher

The collective view of the workshop participants of the role of the teacher in the schools of the region is that the teacher's role includes the following:

The teacher is to:

a) ensure students' physical well-being;

b) promote skills and competency in literacy and numeracy, sensitivity to the environment and harmony between the school and its community

c) help growth of basic skills and attitudes for proper and continued development of cognitive, social, moral and emotional growth;

d) transmit the culture and knowledge, and to help students become aware of the world community;

e) nourish creative and critical abilities;

f) encourage adaptability in a dynamic and ever-changing society;

g) help each individual achieve full self-actualisation and become a fully functional member of society;

h) provide the students and the community with an admirable role model of the professional teacher; and

i) be accountable to the community and to parents.

In order to undertake these tasks teachers need to:

a) ensure their continuing personal development including the upgrading of knowledge and teaching skills;

b) be aware of the values and attitudes which lead to healthy human society;

c) be involved actively in the affairs of the local community and society;

d) provide effective management of the learning environment and resources;

e) be skilled in linking the curriculum of the school with the needs of the community;

f) be skilled in counselling individual children and the management of groups of children;

g) be skilled in the use and choice of a variety of teaching methods;

h) be skilled in working with parents and other members of the community; and

i) be skilled in a variety of appropriate research methodologies.

Chapter Two

REVIEW OF NATIONAL STUDIES OF TEACHER EDUCATION

Introduction

Summaries of the country survey studies were made, focusing on the issues and needs for teacher education and the suggested plans for action. A regional overview developed from these summaries is given in Chapter Three.

The country summaries are presented in alphabetical order.

AUSTRALIA

Background. Australia has moved from a substantial shortage of teachers in the 1950's and 1960's to a position of over supply in the 1980's. This change came partly from a large reduction in resignation rates of teachers, especially women teachers, and a levelling-off in student numbers in schools. There was a substantial expansion in teacher education in the 1970's with many new institutions, including many colleges of advanced education and some universities. With the reduction in demand, there have been amalgamations of colleges, and some amalgamations between colleges and universities. The predominant pattern of preparation is the B.Ed. for primary teachers, usually three years plus teaching experience plans one further year, and a bachelor's degree plus Diploma of Education for secondary teachers. There was a substantial national inquiry into teacher education (NITE, 1980) in 1980 but most of its recommendations have not been acted on. An initiative of the Federal Minister for Education in November, 1986 indicates the likelihood of another inquiry.

Issues

Provision. There are still shortages of teachers in some specific areas, such as mathematics, science, and computer technology.

Initial preparation. The organisation of field experience remains a major concern, as are the processes for its evaluation. Some consideration is being given to teachers of Years 7 and 8 (beginning secondary) teaching a wider spectrum of subjects. There is general concern over the uniformity of teaching approaches.

Career development. Induction occurs with little contact between school and training institution. Considerable emphasis is being given to the professional development of teachers, including in-service education. School-based, system-based and institution-based courses have their place.

Teacher education personnel. With the reduction in numbers of students in training, there have been substantial cuts in finance for teacher education. Few new

appointments are being made, and this will lead to an increasing remoteness of teacher education staff from schools.

Support services. Two major factors strengthen the need for support services; the emphasis from official reports and other studies on the need for change in secondary education; and the rapid impact of technology, including information technology, on the ways people learn and gain access to information.

System links and cohesion. The responsibility for teacher education has moved entirely to training institutions and away from departments of education.

Needs

a) A closer relationship between practical experience and theoretical studies in pre-service courses.

b) An organic link between pre-service courses, in-service activities and the regular work of schools, involving co-operation between departments of education, training institutions and schools.

c) Means of introducing new teacher education staff and developing stronger links with schools and education systems for existing staff.

d) The involvement of teacher education staff in the new curriculum initiatives, including the redevelopment of secondary education and the use of the new information technology.

e) An enhanced capacity in teacher education institutions for self-evaluation and the development of more varied and effective processes in teaching and research.

Plans for the future

The Federal Government has recently formed the Commission for the Future, to act as a focus for institutions, groups and individuals to focus on decision-making as it may help to form the future. This indicates the need now felt by all institutions to increase their capacity for a more initiatory role in policy development, rather than having the opportunity only to react to problems after their appearance. This is a very lively aspect of current Australian society, as we seek to develop our organisations and institutions in ways which are more responsive to social and individual needs and which obtain wider participation by people in the decisions which affect them.

CHINA

Background. Since the ending of the ten-year turmoil of "Cultural Revolution" in 1976, the Chinese Government has constantly emphasized the significant rôle of teacher education. In the light of the open-door policy and the four-modernization drive, teacher education is perceived as a "machine-tool" of educational cause and the fundamental base for cultivating a new generation, ready to commit themselves to face the challenges of the modernization, the world, and the future.

Issues and needs of innovation

a) A need of in-depth perception of the importance of teacher education in today's world and China and a radical change of status of teacher and teacher education as a profession. A Law of Teachers is going to be developed.

b) The increase of funding and the improvement of teaching condition. Priority is to be given to teacher education institutions in terms of:

   i) the distribution of finance, personnel and facilities;
   ii) arrangement for capital construction;
   iii) recruitment of teaching staff; and
   iv) admission of excellent candidates.

c) Expansion and reform of enrolment.

   i) The emphasis on the training of junior secondary school-teachers; teachers of the "shortage" subjects; and teachers in border areas and minority regions.

   ii) Priority of selecting candidates for admission.

   iii) The practice of recommended-based admission, with strong control over the academic achievement, the development of morality, intelligence, physical constitution, and a willingness to be devoted to the career of education.

   iv) The experiments of oriented-enrolment programmes, in which the local bureau of education is authorised to select the candidates who have to be assigned upon graduation to teach where they come from.

d) The establishment of multi-level, multi-pattern networks for in-service teacher education.

   i) The needs of "life-long learning" concept for in-service teachers.

   ii) The nation-wide expansion of short-term classes, single-subject training classes, spare-time studies, correspondence courses, radio-TV courses, and audio-visual courses.

   iii) The initiation of general universities and colleges in teacher training programmes.

   iv) The active involvement of academic societies, professional organizations, government agencies, and other political and social forces in in-service teacher training programmes.

   v) The establishment of Lecture Teams for Teacher Training working in the less-developed areas.

   vi) The access of self-taught examination system for in-service teachers.

e) Priority in development of teaching personnel for teacher education institutions.

Recommendation-based admission for normal school graduates to the higher teacher education institutions on the condition that they have to come back and teach upon graduation.

More opportunities for teachers' advancement studies through:

i) the establishment of Centres for Teachers' Advanced Training;

ii) the provision of post-graduate programmes for in-service teachers; and

iii) developing exchange and co-operative programmes with universities abroad.

The practice of contract-based recruitment and the teacher promotion system.

The rejuvenating of teaching force.

f) Teaching innovations for better quality of teacher education.

i) Guiding principles: Teacher education institutions at all levels should effectively serve the implementation of 9-year compulsory education, and the improvement of basic education in the era of new technology.

ii) The overall goal – to reinforce the political and ideological education and career orientations so as to cultivate cultured persons as teachers with lofty ideals, high morality, showing discipline, and a sense of mission as educators – "the engineers of the human soul", and "the gardeners of the nation's flowers".

iii) Reorganization of specialisation in accordance with the current changes of school curriculum and programmes e.g. the needs of teaching of physical education, music, arts physiology, hygiene, computer science and vocational education, etc.

iv) The cultivation of creative imagination, and independent and innovative thinking, as well as the competence of teaching, rather than a mere transition of knowledge.

v) Up-dating educational courses, and making educational theories integrate with practice.

vi) The priority of educational research.

vii) The wide-spread use of media, the establishment of satellite programmes for teacher education started from 1 Oct. 1986.

g) The Reform of contract and administration.

i) The establishment of Teacher Education Department under the State Education Commission.

ii) The proper division of control between the central and local government.

iii) The on-going evaluation on teacher education programme is being made as basis for accreditation and control over the quality of programme.

iv) The practice of teacher certification.

v) The restriction against the distraction of job assignment in other positions.

vi) The need of close-co-ordination between the pre-service and in-service teacher education.

Future plan

In 1985 the State Education Commission proposed a 15-year (or longer) plan for the fostering of a qualified, stable, and sufficient teaching force for elementary and secondary education with rational ranges of age, speciality, and level:

Phase 1. (in 5-7 years): The stress would be on the reorganization and retraining of the existing in-service teachers, and the replenishment of the "shortage-subject" teachers.

Phase 2. (in another 5-7 years): The further replenishment and cultivation of qualified teachers in all subjects.

Phase 3. (open): The establishment of higher standards of qualification for teaching force both in their academic preparation and professional competency as teachers.

INDIA

Background. There are nearly 3.5 million teachers in the formal school system. The primary school teachers are all required to have 10 to 12 years of general school plus two years of professional education. Secondary teachers have a minimum of First Degree from the university plus one year of professional education. In general, there is no dearth of manpower, difficulties exist, however, in some parts of the country. Salaries of the teachers are lower than available in other services. The Government of India had set up a Commission to study all aspects of teacher preparation including their service conditions. Recommendations at present are pending with the Government. These will be implemented in light of the recommendations of Pay Commission (1986) and National Policy of Education 1986.

Issues

Curricula for pre-service education of teachers do not get revised sufficiently frequently and in response to changing circumstances. The revisions have to be reflected by nearly 100 universities and 31 state departments of education.

There is a mismatch between teacher education programme and availability of teachers in different subjects/geographical areas and for special groups (tribals

and socially deprived groups). There is a shortage of teachers in fine arts, music and vocational areas at the secondary stage.

The profession is not able to attract higher calibre graduates from the universities and Boards of Secondary Education: low salaries, poor living conditions in rural areas are considered responsible for this stage of affairs.

Time available for pre-service education of teachers is inadequate for development of necessary attitudes and values. At the secondary level, no attention can be (is) paid to competence in the subject matter. Induction programmes are not available.

There are several institutions and systems for inservice education of teachers ranging from school complexes at the decentralised levels to programmes designed and executed at the central level but co-ordination between various agencies is yet to be obtained. A self contained system of planning, monitoring and evaluation needs to be developed.

Distance education, specially through electronic media needs to be extended.

Elementary teacher education is manned by personnel educated for secondary education. Separate provisions for preparation of elementary teachers educators have been provided at few places only.

Future plans

Comprehensive institutions are being set up at District Level which would look after the pre-service education of teachers for the elementary schools, instructors for the non-formal and adult education programmes as well as in-service education of teachers. The institution will be well staffed with proper infra-structure.

A strong and large system of inservice education would be developed with institutions at the central, state and district levels having clearly defined responsibility of planning, monitoring and evaluation of programmes.

Distance education electronic media communications would be used heavily for meeting the needs of large numbers of teachers.

Teacher education institutions will be equipped appropriately to prepare teachers in use of computers.

National Council of Teacher Education will be given appropriate status and powers for improvement of teacher education in the country.

INDONESIA

Issues

Assignment of teachers to schools in remote areas remains a serious problem. Development of programmes to motivate new teachers to accept assignments in remote schools and to reward teachers who remain in remote schools after assign-

ment must continue and receive high priority. It is important that when any new strategy is tested in this regard, effective monitoring and evaluation systems be put in place to provide information to decision makers on the success of the programme.

Most supervisors responsible for the teacher training schools are former headmasters of secondary or primary schools who occupy these supervisory positions without sufficient training. The number and distribution of supervisors is low and not always realistic given the geographical spread of schools. Transportation and communication in many regions are difficult. Sufficient funding is seldom available for transportation. The frequency of supervision, therefore, is low. Supervisors, when they are able to visit, tend to focus on administrative matters rather than on the improvement of the teaching/learning process.

An examination of the curriculum of the primary and preprimary SPG programmes suggests that the small differences in training courses between the two specializations may make it simpler to co-ordinate the training between the two streams. (This conclusion is based on the assumption that enough specialized training is being provided for the preprimary track under the current structure). The rationale for many of the differences between the two curriculum streams is not obvious. It is possible that the staff of the local teacher training schools are able to interpret these curriculum requirements in a manner that allows them to effectively present the material. However, on the surface the structure appears complex and consideration could be given to simplification of the system.

The in-service training programmes for teachers at the primary level are varied. Rather substantial resources have been invested in in-service training programmes at the local teacher training centres and short courses at the IKIPs and FKIPs. Significant improvements can be made through innovative in-service/on-service approaches to teacher training. An example is the effort to provide training and develop materials which do not require the secondary school teacher to spend so much time preparing lesson plans. These in-service efforts require co-ordinated implementation and careful evaluation to determine which programmes or combinations of programmes result in the maximum benefits.

Teachers entering the job market trained at the diploma level are not required to take civil service examinations. Their better trained S1 counterparts must take civil service exams which can delay their employment for as long a period as years. Consideration should be given to modifying this requirement.

Multi-jobbing is an issue at all levels of teaching. Many teachers hold a second job, and some hold even a third. While this practice may increase the capacity of the system which suffers from a lack of well trained staff, it may be accompanied by decreased productivity in terms of a reduction in instructional time, attention and assistance the full-time teacher can provide to his/her students.

There is a common view among officials interviewed that teachers are not well prepared to teach the subjects they have been assigned. Approximately 90 per cent of the teachers are assigned to subject areas for which they have been trained. The adequacy of the training is, therefore, in question. Many other coun-

tries have recognized the importance of reducing the proportion of general pedagogical training to specific subject matter training. However, given their current resource limitations, pre-service teacher education programmes would have a difficult time responding to a need for improved subject matter training.

Field practice is more limited for secondary teacher trainees than for those at the primary level. Because students and faculty favour field experience assignments close to the university, some schools near training institutions feel overrun accommodating trainees for field experience.

The present responsibility for secondary teacher education is primarily in the Directorate General for Higher Education whereas the supervision of primary teacher education is in the Directorate General of Primary and Secondary Education. This split results in very little co-ordination of teacher training efforts or the development of coherent strategies between sectors.

Needs revealed

There is an urgent need for more information on external efficiency. Studies are required which utilize a quality measure of teacher performance. Tracer studies should be developed to help determine the extent to which the graduates of the teacher training schools are able to meet the requirements of the job for which they are being prepared. It is important to learn the effect of multiple employment among teachers.

The efficiency of the teacher training system has been continuously rising over the last several decades in term of raising the formal qualifications of teachers. Yet, there is a widespread view that the actual quality of the instructional delivery system has been declining, that the standards for degrees and programmes have been eroding due to the demand for increased numbers of graduates. The recently reinstituted national examination should yield data on the internal efficiency of the system over the next few years in terms of the output.

Future plans

The Directorate of Teacher Training has placed a priority on developing programmes to remedy the problem of assignment of teachers to remote schools and keeping them in these schools once they have been assigned. Many teacher training graduates simply do not accept assignments to remote areas opting instead to find non-teaching jobs. This is not a new problem. It has been studied in the past and a number of potential solutions attempted. None of the solutions has proven fully effective. The current emphasis of the MOEC in finding a solution to the problem is an appropriate one, but other innovative approaches need to be explored. Given the current and projected oversupply of primary school teachers nationwide, now may be an appropriate time to experiment with incentives and disincentives that would not normally be implemented in a period of teacher shortage. Any such programmes, however, must be accompanied by monitoring and evaluation systems to effectively judge the success of the programme and provide the information to decision makers in a timely fashion.

Almost all recommendations for the improvement of education in Indonesia stress the upgrading of quality. It is absolutely essential that a baseline be obtained for teacher quality so that progress can be measured. Competency-based teacher examinations, in accord with the current competency-based approach for training teachers, should be developed centrally and required for all levels of teacher training, both pre-service and in-service, including the tertiary level (IKIP and FKIP). Such examinations should be of great assistance in the design of programmes to improve the quality of education in Indonesia. The current practice of relying on local institution-developed examinations does not ensure that all graduates can demonstrate the skills actually required for effective teaching.

There is great potential for improving performance given limited resources if complexity is reduced. For example training programmes, already relatively short and less than ideal are likely to achieve a better result if teacher preparation is focused at the secondary level on only one subject area, such as science, with no requirement for a teaching minor. Minimum competency in other subject areas that must be taught on an emergency basis will come from the current requirements in general education. There is a multiplier effect: when teachers become more competent, less instruction can produce a higher level of student achievement which will allow students to learn more efficiently. Hence, the system achieves a higher level of efficiency for the time and resources invested as both teacher and students become more competent. Baseline data from the teacher examination recommended above can ratify or discredit such efforts over time.

As part of the overall strategy for teacher education, the government should adopt a policy of subsidizing the private sector based on changing public need. An example can be drawn from the present extreme over-supply of SPG output considerably. The majority of the output comes from the private sector, which outproduces the public sector substantially. Therefore, if the government is to rationalize SPG output, it must have a mechanism for encouraging private sector schools to redefine their purpose.

In the foreseeable future, teachers will continue to hold more than one teaching job, and it is important that the teacher education process anticipate this multiple-job environment for teachers.

JAPAN

Issues identified and needs revealed

Conventional programmes for teacher education. The content of professional courses and other subjects offered as part of teacher education in many universities has not improved so as to cope with the recent changes in the mental and physical condition of children, as well as the changing curricula of primary and secondary schools.

Shortage of schools for practice teaching.

The notable increase in the number of applicants for teacher certificates has made it difficult for students to find schools in which to carry out practice teaching. As a result practice teaching is done rather perfunctorily and superficially.

Teacher education

Inadequacy for the training of teacher educators.

Currently no provisions for the training of teacher educators have been developed. Selection procedures for teacher educators exclusively belong to the faculty or department concerned in each university. The existing practice is almost the same in the cases of other faculties (departments) such as law, economics, business administration. That is, academic achievement of the candidate is the most important factor to be recruited as "teacher educators".

It means that no intensive consideration has been taken of concerning the eligibility of teacher educators. Many of the teacher educators hitherto might have been scholars or researchers on educational science, and they rarely have teaching experiences in primary and/or secondary schools previously. Teacher educators tend to be academic-oriented too much. In selection procedures, therefore, practical aspects of the candidate are generally neglected in many cases.

Difficulty in teacher recruitment.

The decrease in the number of teachers employed is likely to continue for the next two decades at least, due to the decrease in the number of children. This tendency has resulted in a marked imbalance between those who have obtained teacher certificates and those who actually work as teachers.

Lack of adequate training programmes for beginning teachers. At the beginning of their teaching careers it is important to provide adequate training programmes for beginning teachers so as to help them make a successful start of their educational service. However, beginning teachers today are treated as if they are veterans or experienced teachers in the schools and classrooms they serve from the very first day when they are employed and appointed. Therefore, they have not any experiences except two or four weeks practice teaching in university days.

Duplication of INSET programmes. The division of responsibilities among the national, prefectural and municipal governments for INSET is not clear, and INSET programmes are planned, implemented and evaluated in a different level in respective ways. Duplication of the programme is often observed. Many people recognise the vital role of education centres which are administered by prefectural and municipal governments. However, for example, the INSET programmes are criticized by trainees (teachers) to be not necessarily in compliance with their needs.

Future plans

Reform plans revealed by the National Council on Educational Reform

National Council on Educational Reform, Advisory Council to Prime Minister Nakasone, made public its second report in April, 1986. In its report the Council offered advice on a basic direction for education as we move towards the twenty-first century.

REPUBLIC OF KOREA

Issues identified

A nation-wide survey of 3,700 primary and secondary school teachers was made in 1983 by the Korean Federation of Educational Association as to whether teaching should attain a higher level of professionalization. A higher percentage of replies was recorded on 'long term education and training', 'more rigorous standard of qualification', 'extension of autonomy and responsibility'.

To the question about how well teacher education institutions carry out their functions, the survey revealed the need for (a) an evaluation of pre-service education; (b) an evaluation of in-service education; and (c) the improvement of the teacher education system.

Evaluation of pre-service education. Greater efforts based on an evaluation of the management of teacher education institutes (1982) were made. These efforts were to:

i) research and develop curricula and teaching and learning methods;

ii) inculcate the sense of duty and morals into teacher trainees by re-establishing the goals of teacher education; and

iii) enhance their qualities and competencies to perform 'the Well-educated Man' concept effectively.

Evaluation of in-service education. At the same time, the outcome of in-service teacher education was evaluated by the Board of Evaluation commissioned by MOE. An evaluation exercise on the outcomes of in-service education for administrative and professional staff in the NIERT was performed by the Board under the supervision of the Ministry of Government Administration. The results of performance analysis of in-service education were summed up as follows:

i) The Budget allocated for 1985 was effectively used for the development of participation-oriented instruction;

ii) According to the Evaluation Report, facilities and equipment were used for and oriented toward adult education and participation-oriented instruction;

iii) As the results of in service education survey reports were printed and distributed, they promoted the dissemination effects of in-service education. These reports will contribute towards improving the content of in-service education programmes through continuous examination and feedback of the results;

iv) Programmes for trainers education and seminars and workshops held for them in 1985 were of great help in enhancing their abilities and competence; and

v) During the last two or three years, the contents of revised curricula and diversification of trainers education have contributed much to the

qualitative improvement of in-service education programmes. As a result, most of the programmes were re-organized to the direction in which trainers wanted to be trained.

It was also pointed out that uninterrupted efforts should be made in order to reinforce studies on trainers education, to readjust the scope of lecture-discussion suited to participation-oriented instruction and to obtain the qualitative improvement thereof.

Needs revealed

Improved direction of teacher certification. Research undertaken by KEDI in 1983 considered effective management and operation of the teacher certification system as the key to success in teacher education and proposed improvement directions for teacher certification system as under:

a) Teacher education institutions and education programmes should be reconsolidated and reorganized so as to upgrade the quality of teachers in terms of both theoretical knowledge and practical skills. The quality of teacher education programmes should be intensive as well as comprehensive so as to enhance teachers' professional competence.

b) Throughout the entire stages of teacher education courses from the selection of student teachers up to the graduation thereof, the operation of a more reasonable and systematic evaluation mechanism than the present system is needed. The quality of student teachers must be evaluated continuously on the basis of both their professional competence and their whole personality.

c) The current classification of teacher certificates by school level should be transformed to three categories on the basis of the child development and the educational development trends, such as the degree of children's physical and mental growth and the universalization of pre-school education, and primary and/or middle school. The three categories are the teacher certificate of lower grade level, middle grade level and upper grade level. And if needed, the teacher certificate of secondary school level as now, can be allowed to exist concurrently.

d) In connection with the revision of the teacher certification system by school level, the teaching subjects for the teacher certificate may need to be changed. Teaching subjects for the teacher certificate of lower grade level may not be specified as all subjects of the curriculum can be taught by one teacher. Two (one major and one minor) or three subjects which they are qualified to teach may be entered.

Improvement of teacher education system. In 1986, a Ministry's research committee was assigned to undertake a study which will contribute to building a linkage between teacher education programme and teacher employment system. Major items of the study include:

a) Recruitment methods (involving special recruitment such as appointment by recommendation of superintendents);

b) Selection method (screening criteria based on personality and aptitude);

c) Exempting students of national teachers college and/or colleges of education from tuition fees;

d) Propriety of compulsory service in the teaching profession after graduation;

e) Improving measures for effective management not only of curriculum and educational affairs but the characters and scholastic achievements of students;

f) Graduation and certification system, certification and employment system; and

g) Internship programmes.

Improvement of institute-based in-service education

In-service teacher education was conspicuously intensified in accordance with 'the Revision of Ordinance for In-Service Teacher Education' in 1983. At present various forms of in-service education are carried out by the educational institutions such as national teacher's colleges, National Colleges of Education and Educational Research Institutes within the Municipal and Provincial Boards of Education across the Country.

The most conspicuous change in in-service education in Republic of Korea for the past three years is the development of training programmes for the educational staff including educational administrators, principals and senior supervisors and other professionals by the National Institute of Educational Research and Training (NIERT).

As the NIERT was reorganized and given a special function to retrain educational administrators and various educational professionals, its staff development programme has thus been intensified.

The following delineation represents changes in the staff-development programme for the above mentioned educational staff.

a) The traditional teaching method, i.e. lecture-dominated instruction is transformed into participation-oriented training programmes.

b) The participation-oriented training programme consists of (i) seminar; (ii) workshop; (iii) small-group discussion; (iv) discussion-centred training with field visits; (v) independent study; (vi) discussion with decision makers in charge of development and implementation of educational policies and plans; (vii) simulation game for setting up future-oriented educational plans; and (viii) field study.

c) A synthetic evaluation programme is adopted to assess the outcomes of programmes. The programme includes: (i) evaluation relating to achievement made by trainees; (ii) self-study programmes attained by trainees; and (iii) follow-up monitoring. All aspects of the programme

have contributed to the development of the trainee's quality and attitudes.

Future plans

a) With a view to inducing highly competent and talented teacher applicants, better induction plans and practices need to be developed for (i) inducing perspective teachers in the teaching profession; and (ii) developing an induction system for educational personnel, including teacher educators, administrators and other educational personnel.

b) Development of a network of training institutions in order to develop competencies, skills and values required of educational personnel.

MALAYSIA

Malaysia has a two-tier system of teacher education, with the Ministry of Education being responsible for the training of teachers for primary and lower secondary schools through its 28 teachers' colleges and the Faculties/Centres of Education in five local universities for the training of teachers for upper secondary schools.

The survey revealed a concerted and systematic attempt by both the Ministry of Education and the Universities to review the structure and curriculum of training of teacher education programmes in consonance with the changing needs of schools. There was evidence of greater sensitivity and responsiveness not only to national concerns and aspirations but also to specific regional requirements in the development of these programmes.

Issues identified

At the primary and lower secondary level, the structure of the teacher education programme underwent frequent changes in the period 1981 to 1986. The three-year pre-service teacher education programme introduced in 1981 was slightly modified to accommodate a semester system in 1985 and again reduced to two and a half years in 1986 to help meet an increasing demand for teachers. This demand was caused partially by the improvement of the class:teacher ratio in primary schools. The re-introduction of part-time training of attachment (temporary) teachers in 1984 was accompanied by an increase in the annual student intake into teachers' colleges from 5,000-6,000 to an uprecedented 10,000-11,000 beginning in 1985. Positive measures were introduced to attract more men into the profession.

An attempt to balance the rapid quantitative expansion of teacher education with the maintenance of a high level of professional competency among teachers saw the injection of various 'qualitative improvements' into the teacher education curriculum. Pedagogical changes in response to the New Primary School Curriculum (NPSC) led to renewed emphasis on strategies and concepts like 'integration', 'assimilation', 'enrichment' and 'remediation'. New subjects such as Citizenship Education and Islamic Civilization were introduced to promote greater awareness

among student teachers regarding national norms and objectives and to help reduce communal and geographical polarisation.

At the upper secondary level, faculties of education in the local universities developed 'concurrent', 'consecutive' and 'off-campus' teacher education programmes to help meet shortages of, first, mathematics and science teachers, and, more recently, teachers in the languages and humanities.

These changes, however, came about during a period of contracting resource allocation in the public sector leading to constraints in their implementation and grave limitations to their effectiveness.

Needs revealed

The most frequently highlighted cluster of needs revealed by the survey was thus the development of strategies to cope with the scarcity of financial and human resources and physical facilities which generally impeded the implementation of most programmes. In 1986 increase in financial allocation for primary and lower secondary teacher education was only 10 per cent over that of the previous year, compared with an increase in student intake of almost 80 per cent. The financial constraints have somewhat curtailed a corresponding increase in posts for supporting or auxiliary staff. Reduced financial allocation has considerably delayed the construction of five new teachers' colleges, leading to congestion in the existing ones. Limited funds have also affected the proper supervision of students during off-campus teaching practice, both in the teachers' colleges and the universities.

At the same time, there was an increasing awareness of the need to improve both pre-service and in-service teacher education in terms of planning and organization as well as content and methodology. More stringent student selection procedures were advocated. There was a move towards decentralization in college organization and administration, curriculum planning and evaluation procedures in an attempt to foster greater sensitivity to local needs.

There was increasing concern about the competence of teacher educators who were largely recruited from the ranks of secondary school teachers but who were increasingly assigned to train potential teachers at the primary level. Future teacher educators would need to have teaching experience at the primary school level so that they could acquire the necessary skills to train teachers more effectively at this level.

In the field of in-service teacher education, there was a felt need for more systematic planning, implementation and evaluation of staff development programmes leading to a more positive effect of these programmes in changing teachers' behaviour and bringing about innovations in the classroom. This, in turn, would call for the intensification of on-the-job in-house training in teahcers' colleges, the establishment of more effective teacher centres at the state and district levels, and the introduction of distance learning facilities.

Finally, it was felt that there should be closer and better co-ordination between the teachers' colleges and the universities in the planning and implementa-

tion of teacher education programmes, and especially in the field of research. Various collaborative research efforts have been attempted since the early 1980s and these could be intensified in the coming decade. At both levels of teacher education, there is a pressing need to diversify instructional strategies so as to make foundation and other essential courses more interesting, meaningful and effective.

Future plans

The major issues and emerging needs highlighted by the teacher education survey pointed towards the consolidation of teacher education programmes in the coming decade with an emphasis on the following activities:

a) Research to build up reliable and applicable materials and data for effective changes in teaching and teacher education;

b) Maximizing the available resources for teacher education, with greater sharing of personnel and physical facilities, and a gradual move towards privatization of some services in teachers' colleges;

c) Intensification of innovative approaches to pre-service and in-service teacher education, especially in the field of in-house and distance learning facilities;

d) Streamlining of the curriculum with an increased bias towards effective practical exposure for student teachers and a renewed emphasis on attitudinal change and 'integrative' experiences;

e) Greater decentralization in the planning and implementation of teacher education programmes at the certificate, diploma and degree levels; and

f) Systematic evaluation of teacher education programmes with special emphasis on the effectiveness of teachers in the classroom.

MALDIVES

Issues

Teacher Education is one of the principal activities aimed at achieving Universal Primary Education by 1995 in the Maldives. Teacher Training began in 1977 when the government schools in the capital, Male', were almost entirely staffed by expatriates and almost all the schools in the atolls were staffed by untrained teachers. Over the last nine to ten years no systematic and detailed survey has been undertaken except this one.

The main issues identified in this survey are:

a) Expansion of pre-service training;
b) Expansion of in-service training;
c) Staff development;
d) Physical upgrading of teacher education facilities; and
e) Evaluation of teacher education programmes.

Needs revealed

The development needs identified at national level are to:

a) improve the living standards of the population;
b) balance the population density and the economic and social progress between Male' and the atolls; and
c) attain greater self-reliance for future growth.

Maldives hopes to achieve the above three objectives by the end of the century. All the objectives are important and interdependent, thus all three are given highest priority.

More specifically it may be important to view the teacher education needs in the context of teacher requirements. Considering the fact that in 1980 only 43 teachers (4.3 per cent) in the atolls were trained, the urgent supply of trained teachers, in general, is a key element in integrating the traditional system into a modernized one. By 1985, 287 primary teachers were trained for the atolls and there were 769 untrained teachers. Most of the untrained teachers work part-time only. By 1990 at least 1,287 trained primary teachers will be required for the atolls and by 1995 at least 1,481 teachers. The present annual output of 40-50 teachers must be almost doubled as of now to achieve targets.

The situation for the capital Male' is different. In 1985 there were 138 expatriate primary teachers in Male'. The number of primary teachers required by 1990 is 248 while by 1992, 286 primary teachers will be needed to replace the expatriates. These figures are based on average pupil-teacher ratio of 30:1.

The present training capacity for primary teachers in Male' is 20-25 annually. This implies the target of 286 trained primary teachers for Male' falls short by 86 teachers. Thus the need for rapid expansion of pre-service teacher training programmes is imperative.

Coupled with this is the issue of staff development. The one and only teacher education institute in the country intends to maintain the full-time staff trainee ratio at 1:16. Seven new persons are hoped to be trained between 1986 and 1988 to join the present staff of nine teacher educators.

Rapid expansion in both pre-service and in-service training together with staff development, should accompany the physical progress of teacher education facilities. This would imply an increase in the number of classrooms with better learning facilities, an increase in staff accommodation and expansion of library resources and equipment.

The physical shift from being a teacher training section within the Educational Development Centre to a full-fledged Institute for Teacher Education in its eigth year of teacher training history was a worth while development. By now the structure of courses offered, the subjects taught and methods of evaluation have undergone considerable changes.

Teacher education

The opportunity for teacher trainees to engage in a school experience programme during the first year of training is also an innovative outcome which has proved to be very essential and useful.

Future plans

In order to meet the requirements for providing UPE. It is imperative that the present teacher education programmes take different forms. "It seems logical for the ITE to look outside of Male' and to consider reaching out to the atolls in the conduct of both its in-service and pre-service courses and to formalise the "outreach" by establishing one or more outposts of the Institute in other islands. These outposts can be used for accommodating some student places for the pre-service course, later they can be used as in-service centres or "Teacher Centres".

The introduction of distance education to raise the standard of entry requirements of teacher training courses is seen as a favourable alternative. These programmes can be launched through the Atoll Education Centres (AEC) under the guidance of the headmaster. One AEC now exists in each of the 19 atolls.

If such a measure proves fruitful the training courses could be reduced to one year as was the case in the initial 4 years from 1977, thereby doubling the number of graduates annually.

Presently, only primary teacher training is undertaken in Maldives. But now it is time to start middle school teacher training for the middle schools being established in many atolls.

Overall in-service programmes are to be planned in order to overcome the ad-hoc basis in which such training is presently provided.

A programme of staff development to train more teacher educators and upgrade present staff will continue in the years ahead.

Measures are being taken to improve physical facilities. Improvements in classroom environments in terms of thermal, acoustic and visual characteristics have been considered.

The need to change from more informal to scientific evaluation practices of teacher education programmes is essential. No specific plans have yet been identified in this regard.

NEPAL

Issues

Teacher training in Nepal has been going on without any full-scale assessment of the quantitative and qualitative needs. There is no mechanism to obtain reliable baseline data on which to plan teacher education programmes. The present system has been quite inadequate in terms of meeting the primary needs of the school, i.e., training of teachers in teaching the various subjects.

Using the teacher education budget: total education budget ratio as an indicator, it has been found that the trend is towards a decreasing proportion of allotment to teacher education programmes. Additionally, the growth rate in resource allocation to the education sector as a whole compares favourably high in comparison to the growth rate of the same in teacher education. Thus, expenditure on teacher education has not been tuned to the same growth rate as that of the education sector as a whole.

Part of the national resources has been spent on some new innovative projects, including the Education or Rural Development Project in the Seti Zone and the Primary Education Project which is now being launched in six districts. These projects have developed new structures of training teachers while on the job and strike an innovative departure from the tradition of campus-based teacher education programmes. The teacher education campuses can learn much from these projects but there has been practically no confluence between the old and new structures of teacher education.

The manpower capacity of teacher education is adequate generally, although in some areas the shortage has become critical, rendered more so with the deputation of qualified teachers educators elsewhere. There has been a very unfair distribution of able teachers among the several campuses of teacher education, the outlying campuses being generally served by lowly qualified and inexperienced hands and the Kathmandu campuses being overstaffed with the comparatively better hands. Although quite a big proportion of the present stock of teacher educators are underqualified/untrained in the formal sense, informal occasions such as seminars/workshops/mobile workshops have compensated for the inadequacy through exposure of the underqualified/untrained backlog to various issues emerging in the education sector. Yet, should the teacher education programmes be expanded or improved intensively, an increased number of teacher educators would be needed.

The production capacity of teacher education in terms of trained school teachers has been low because there are fewer entrants for the pre-service courses. Limited government resources to support the training programmes has affected the in-service programme enrolments also. It is doubtful whether the country would be able to maintain the current ratio of trained teachers at school level, with further expansion of the schooling system and at the current rate of teacher production. Universal primary education by AD 2000 remains the target in the education sector, implying a tremendous task for teacher education to undertake. As matters stand at present, teacher education may not be able to meet the teacher requirement by that time.

Needs

Rigorous research on teacher education performance remains to be done. A sociological or ethnographical sort of research on teacher education is required.

The highly useful insights gained from the experimentation of the externally assisted innovative projects on teacher education (the Seti Poject and the Primary Education Project) have to be utilized profitably in the revamping of the institutionalized programmes of teacher education.

NEW ZEALAND

Background. During the 1970s three year training for primary teaching was introduced and kindergarten training programmes transferred to primary teachers colleges. Over the same period colleges established relationships with their local universities leading to either conjoint B. Ed. programmes or crediting arrangements within other degree structures.

By 1978, the number of teachers college graduates exceeded the demand for teachers and college enrolments declined to half their previous total by 1982. As a result one college closed and a number of shared site arrangements were developed with technical institutes. Teachers college staff who resigned or retired during the period were not replaced.

A change in government occurred in 1984 accompanied by a new commitment to improve the staffing of kindergartens and schools. Increased intakes into college programmes has resulted and to ensure a supply of college staff with recent and relevant educational experience a policy of contract appointments was introduced. Other improvements include the introduction of a policy for all teachers entering the secondary service to be both subject qualified and teacher trained.

New provisions were also introduced establishing a professional qualification structure for teachers as an alternative to a university degree but offering the same salary credit.

Issues

Provision. New Zealanders recognize the community is increasing in its diversity and there is concern that the teaching force is not a representative mix. Apart from the shortage of secondary teachers in maths and science, and to a lesser extent commercial and technical subjects, there are also shortages of Maori and Pacific island teachers and women, particularly in senior administrative positions.

Initial preparation. The quality of training that can be achieved in a one year programme for secondary teachers is of concern. The two year kindergarten and one year child care programmes are also regarded as inadequate and consideration is being given to providing an integrated early childhood programme of three years. The differential qualification structure resulting from local university/ teachers college arrangements is also an issue.

Career development. All schools with beginning teachers receive 0.2 of a staff position to support an induction programme in the first year to the two year induction period. A more consistent approach to the development of first year induction programmes is desirable. Better linkages could be developed also among pre-service, induction, in-service and continuing education programmes.

Teacher education personnel. The impact of the 20 per cent college staff contract arrangement requires assessment. A more appropriate mix of college staff is desirable particularly in regard to women, Maoris and Pacific Islanders.

Support services. Improvements in financial and health and welfare service for teacher trainees are being sought. Increased support for the mandatory multicultural programmes in teachers colleges, particularly ancillary staff, is also an issue.

Needs

The following have been identified as areas of high priority in teacher education:

a) More effective means of recruiting women, Maoris and Pacific Islanders into both teaching and teachers college positions;

b) Developing teachers understanding of the needs of those handicapped students being "mainstreamed" into the education system;

c) Improving secondary training in relation to the transition from school to work; assessment in the upper secondary school;

d) Assisting teachers to develop new ways of supporting community involvement in the work of schools;

e) Developing teacher training to health education initiatives;

f) Promoting teacher effectiveness training as an alternative to corporal punishment;

g) Supporting trade union education;

h) Promoting safety in the outdoors; and

i) Strengthening current programmes in the education and training of those working in early childhood programmes.

Future plans

The education system will be strongly influenced by a number of current or proposed reports and reviews. A Parliamentary Select Committee will be reporting on an inquiry into the Quality of Teaching and the recommendations of reports into curriculum and assessment policies are being considered. A Royal Commission on Social Policy will also be associated with a review of tertiary education including teachers colleges.

PAKISTAN

National education policy. With the introduction of the National Education Policy of 1979, the education system in Pakistan is geared to the national needs and the economic development strategy of the country. It has emphasized that the education system is the most reliable means of social transformation. The commitment to universalisation of education, democratization of the education system, vocationalization of education and emphasis on the production of trained manpower have become the major thrusts of the education system as a whole.

Teacher education. In the field of teacher education, the National Education Policy has firmly accepted the crucial role of teachers in the successful imple-

mentation of the education system. It has been recognized that the teacher is the pivot of the entire educational system. In order to promote pre-service teacher education, all the Primary Teacher Training Institutions and Normal Schools are being upgraded to Colleges of Elementary Education. An Academy of Higher Education has been established to provide pre-service and in-service training to the College and University teachers. An Academy of Educational Planning and Management has been established to provide opportunities of training to administrators and supervisors working at different levels of the educational system.

It has been envisaged that every teacher will have to undergo one in-service course during five years of his service. A system of national awards for best teachers will be instituted. Every year 10 teachers of various levels and categories will be given these awards by the President of Pakistan at the national level. Similar awards will also be given to selected teachers by the respective Provincial Governors.

Budget allocation

Allocation of funds for Teacher Education in the Sixth Plan period (1983-1988) is as follows:

	Recurring Expenditure (in million rupees)	*Developmental Expenditure (in million rupees)*
1983-1984	12	16
1984-1985	14	20
1985-1986	18	27
1986-1987	20	32
1987-1988	24	38
TOTAL	88	133

Entry qualifications. The requisite entry qualifications into the teaching profession at different levels are as below:

a) Primary level (I-V): Matric + one year teaching certificate (PTC);
b) Middle level (VI-VIII): Intermediate + one year teaching certificate (CT); and
c) Secondary level (IX-X): B.A. or B.Sc. + one year B.Ed. degree.

Critical deficiencies. Critical deficiencies in Teacher Education are summarized as follows:

a) Short duration of teacher training programmes.
b) Shortage of audio-visual aids and other educational equipment in teacher training institutions.
c) Non-availability of standard text books.
d) Deficiencies of supplementary reading materials/guide books/journals.
e) Lack of co-ordination among training institutions.

f) Outmoded methods of teaching and evaluation.
g) Absence of incentives for prospective teachers.

Allama Iqbal Open University. Allama Iqbal Open University is offering teacher training courses through non-formal system of education. These programmes will go a long way in providing trained teachers for the rapidly increasing number of schools. The Open University has developed useful training material and has launched field experiments which have produced very useful results.

PAPUA NEW GUINEA

Background. Teacher training programmes improved from one-year courses offered in the 1950s to grade VI school-leavers to the present two-year courses which have entry requirements of grade X qualifications. Most of these were in independent mission institutions and it was therefore difficult to maintain and monitor standards until 1970 when the PNG education system, as a result of an inquiry, was unified. This allowed for better supervision and administration of the training although the missions still retain some autonomy.

There are now eight pre-service colleges and one in-service college in the unified system and one other outside of the system. The two-year course offers 11 different subjects and a six months basic skills in maths and english at the beginning of the first year to ensure that a minimum standard is achieved by the trainees and they have the competence in basic skills of teaching in the community schools. The college courses are developed individually from the guidelines provided by the National objectives for each subject.

A number of recent reviews of teacher training programmes by both external consultants and internal committees suggested needs for quality improvements and further research.

Issues and needs

a) Provision of a 3 year course to improve the quality of teaching provided in community schools.

b) Initial preparation – improve school/college communication; improve and research further with the teaching of basic skills courses; identification and use of aids for professional studies; specialization in subjects and need for funds to provide appropriate expertise and supervision.

c) Career development – co-ordination and links with NDOE and provisions for further development of teachers e.g. beginning teachers; basic management and supervision course for institution managers; a programme has been developed to support the weak teachers and provide field-based in-service; provide a national in-service development plan.

d) Teacher education personnel – limited financial resources at times have forced colleges to operate with a minimal number of lecturing staff thus requiring the staff to do extra ancillary jobs in addition to full time lecturing.

e) Support services – appointment and selection criteria for college demonstration school teachers; increase in number of ancillary staff to take over non-professional jobs currently been done by lecturers.

f) Systems link and cohesion – Closer co-operation between colleges and provinces for improved monitoring of teacher training programmes during practice teaching.

Future plans

These are as follows:

a) to commence a three-year teacher training course and continue providing upgrading qualifications of all educational personnel;

b) development of a national in-service framework; and

c) further research into:

i) needs of first year teachers,
ii) basic skills teaching,
iii) programme co-ordination and assessment, and
iv) staff development

Innovations

The following have been achieved.

a) Development of in-service packages to go out to schools at the same time as the curriculum texts;

b) Change in in-service training programmes for school principals to management and leadership programmes; and

c) Pre-training of school inspectors.

PHILIPPINES

Background. Teacher education in the Philippines had its beginnings as early as the Spanish period. Teacher education programmes have always been dictated by the urgent needs of the time.

Before 1950, there were only a few state colleges offering a teacher education programme. However, when the Department of Education reported the gravity of the problem of undersupply of professionally qualified teachers, enrolment in the teacher education registered an upward trend. To encourage more schools to offer teacher education courses, requirements for opening of normal schools and colleges were relaxed. As a result, teacher colleges mushroomed, resulting also in relaxation of standards. To control and improve private teacher education institutions, therefore, various measures have been adopted by the government since 1950. Among the significant measures were:

a) Extending the elementary teaching course from a two-year course to a four-year course in 1950;

b) Ban on the opening of new teacher training courses in 1954;

c) Setting of higher cut-off point in the National College Entrance Examination ratings to admission to the teacher education programme starting school year 1980-1981;

d) Professionalization of teaching through the professional board examinations for teachers in 1980; and

e) Promulgation of "Policies and Standards for Teacher Education" in 1983.

Issues

Provision. The recruitment and admission of quality students into the teacher education programme is a critical concern in teacher education. This concern is linked with the low status and prospects of the teaching profession and the comparatively poor economic rewards for teachers.

Funding. The present economic crisis confronting Philippine society has affected the financial viability of teacher education institutions, particularly private schools whose main source of income are students' tuition fees. Of the 328 teacher education institutions, around 85 per cent are private institutions and 15 per cent state schools.

Continuing education of in-service teachers and teacher educators. Provision for a re-orientation and continuing education of teachers in the field, as well as teacher education, is urgent if educational changes in the programmes of elementary and secondary education are to be implemented effectively. A few instances in the history of the Philippines educational system have shown that educational reforms and innovations failed because the implementors had not been properly oriented and prepared for them.

Dearth of research in teacher education. Considering how important research is for obtaining objective data which can be used as a basis for sound decision-making, the dearth of research data in teacher education becomes more significant.

Needs

The following needs have been identified:

a) Alternative models to improve the quality and quantity of students in the teacher education programme.

b) Extension of government support to help teacher education institutions be more financially viable.

c) Alternative programmes for in-service/continuing education to upgrade competencies of teachers in the field and teacher educators.

d) Mechanism that can be adopted to assure continuing research in teacher education which can be the basis for relevant changes in teacher education.

Plans for the future

Drastic changes have been taking place in the political, social, economic and cultural milieu in which the Philippines educational system operates. However, a heartening trend of late is the initiative being taken by the government, particularly the Ministry of Education, Culture and Sports (MECS) to tackle the issues confronting Philippine education. Initial focus of development plans for education is on the improvement of the status and salaries of the teaching profession. On-going reorientation education of teaching personnel will be continued, both for public and private school teachers, in established centres for this purpose. The granting of certain incentives and benefits to voluntarily accredited teacher education institutions is expected to up-grade teacher education programmes. Evaluation and development of teacher education programmes will continue to be conducted on a collaborative basis with professional and non-governmental agencies.

SRI LANKA

Background. There is pre-service and in-service teacher education in Sri Lanka. In-service is implemented by four universities, 16 teacher colleges and units in the Ministry of Education such as CDTE, CDC, Distance and HIEE. Pre-service (institutional) is a recent development and is handled by the six colleges of education. A pre-service induction programme is conducted by the pre-service unit of the Ministry of Education.

The annual estimate on education in Sri Lanka for 1986 is Rs4,117,756,000*. Out of this about 1/10 is spent on teacher education.

Issues

a) There is still a shortage of teachers in specific areas such as primary, technical and aesthetic.

b) There is a backlog of untrained teachers (primary and secondary), 20,000 non graduates and 10,000 graduate teachers.

c) Quality improvement in some of the teacher education programmes, (e.g. in-service institutional, distance and school in-service) by way of curriculum revisions, staff development, better allocation of resources, evaluating the teacher education programmes.

d) Better co-ordination and link among programmes, within and among ministries, units and institutions.

e) More research to be carried out in teacher education.

Needs

a) More teachers are required for primary schools and for special areas like technical and aesthetic education.

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* Appropriately 29.00 Sri Lanka ruppes (Rs) = One US dollar.

b) The institutional in-service programme, school in-service programme, distance teacher education programme and pre-service induction programme need curriculum revisions, to suit the changed school curriculum and to keep pace with the newly developed teacher education curriculum. Some of the new areas introduced to the newly developed and revised curriculum are life-long education, education technology, research, population education, computer education, community education and education sociology.

c) It has been revealed by the survey that some of the planners of teacher education programmes need further knowledge and greater experience in designing programmes and programme evaluation.

d) There is a shortfall of trained personnel among teacher educators in the field of testing and evaluation and research. There is a need for trained and qualified personnel in the field of school in-service programmes.

e) Research is introduced as a subject in some of the newly developed teacher education programmes. It should be introduced to other teacher education programmes also. Staff development in research is also needed. A separate unit is needed to undertake research in teacher education.

f) There is a need for special teacher education programmes for special areas such as Plantation and Mahaweli.

g) There is a demand for computer education and modern technology from all the teacher education programmes.

h) Co-curricular activities in teacher education is a compulsory subject in the recently developed pre-service teacher education programme. Other teacher education programmes too should give importance to this subject.

i) Teachers and teacher educators need further training in evaluation techniques and procedures of continuous assessment and personality assessment.

j) Community development through Teacher Education University teacher education programmes, pre-service programmes and C.D.C staff development programmes for graduate teachers have introduced community education in their programmes. It should be extended to other teacher education programmes.

k) For quality improvement more resources and resource centres are needed.

Future plans

The Ministry of Education has plans to:

a) provide facilities and opportunities for staff development of teacher educators and teacher education planners;

b) organize a research unit in teacher education;

c) develop the special teacher education programmes such as Mahawili and Plantation;

d) introduce community education to all the teacher education programmes;

e) provide further training to teacher educators in teacher education evaluation techniques;

f) provide more facilities to teacher education programmes;

g) revise some teacher education curricula; and

h) extend pre-service teacher education.

THAILAND

Issues

Pre-service. There are so many teacher education institutions. The majority of them have their own administrative bodies working independently under their own individual charters. Selective universities and open universities where teachers who are being trained have their own charters and are working under the Ministry of University Affairs while teachers' colleges, vocational and technical colleges, physical education colleges and drama colleges also train teachers and are controlled by the Ministry of Education. There is no systematic and authorized co-ordinating structure for bringing these institutions to work together in mapping out the concise plan for the country. Teacher education institutions, therefore, produce a surplus of teachers. Teacher education graduates' unemployment is becoming more and more critical.

In qualitative aspects, teachers are being criticized for being inadequately prepared. Criticism begins with the first stage, teacher student recruitment, up to the final stage of preparation, teaching practice. Recruitment measures employed by teacher education institutions are ineffective. Mainly they are based on entrance examination results while interest and aptitude in the teaching profession is getting less attention. Curricula for teacher training do not correspond with the primary and secondary school curricula. Teaching practice is mostly emphasizing theories, and is lecture oriented rather than practice oriented.

In-service and staff development. The present system of in-service training is done for two purposes, upgrading and updating. For upgrading, teachers go to evening classes offered by teachers' colleges or take courses offered by open universities for getting degrees or diplomas. The programmes are criticized for their irrelevance to the work of teachers in schools. For updating, the programmes are conducted when the needs are felt by the administrators. Teachers themselves have a little role to play in this respect. Many times, teachers attend the training programmes they have previously attended. Sometimes the timing is wrong, leading to teachers having to leave their classes to attend programmes.

Teacher induction. Beginning teachers receive little assistance in starting their job. Mostly, one-shot orientation programmes for a few days are organized by the employer institutions. The programme content is superficial, touching on curriculum structure and the subjects they are going to teach and teacher's codes of conduct.

Needs

Pre-service. There is a need for restructuring the administrative system of teacher education institutions so that their resources could be shared in developing teacher education programmes to meet the need of the country in general and local community in particular.

To improve the quality of teacher education, student recruitment measures, curriculum, and teaching practice need to be revised.

In-service and staff development

Evening programmes for the current teachers should be modified to be more relevant to the teacher's work in school. At present, the same curricula and course syllabus are being used for training of both future and current teachers.

Teachers themselves should take more active roles in developing staff development programmes. Wherever and whenever possible, teachers should be allowed to take initiating roles in organizing them to suit their own needs.

Teacher induction. Since new teachers are taken from the college graduates in teacher education and other graduates, teacher induction should therefore be developed in different forms to suit the different groups of clientele.

Future Plans

Pre-service. To reach a desired restructure of the administrative system is definitely time consuming. In the first stage, the present scheme of teachers college consortium and networking with the other higher educational institutions will be encouraged and strengthened. By means of consortium and networking, resources (financial, man-power, facilities, expertise) will be fully shared.

Secondly, present college and university charters or acts concerning teacher education will be thoroughly investigated and amended. In fact, a new education reform act is being proposed having only one ministry of education. Under the new law, all educational institutions will be put under one umbrella, the education ministry. There will be three main bureaus within the ministry : Bureau of General Education – responsible for pre-school education primary and secondary education; Bureau of Higher Learning responsible for all kinds of education higher than secondary level; Bureau of Religions and Culture.

Improvement of teacher education quality. There has been a pilot study on the recruitment of teacher students by means of selection and examination. The results revealed that, for scholastic achievement, both groups of students are not

significantly different in their performance. But for the attitude to the teaching profession, those students who entered the colleges by the selection basis received better scores. Therefore, in future, recruitment of students by means of selection will be applied widely among the teacher education institutions. In addition to applying recruitment, the idea of student-residence will also be applied. Students are required to live on campus for at least one academic year.

Teacher education curricula are in process of revision and teaching practice will be arranged as a continuous process starting from the first year of enrolment to the fourth year of the programme.

In-service and staff development. Since the school cluster concept has proved to be effective in providing education for children, in-service teacher education based on the cluster system is to be tried out.

School based in-service is successful in some countries and should be introduced as a pilot study in Thailand.

Teacher induction. Two categories of people are recruited to be new teachers: the graduates of teacher education programmes and the graduates of programmes other than teacher education. Induction programmes could be arranged to meet the needs of each group.

a) For teacher graduates, a few days orientation plus working under supervision of experienced teachers for a certain period should be ample.

b) New teachers from the latter will become good teachers if they get a good start. Workshops should be conducted for them and following activities are recommended; teaching observation, curriculum analysis, micro-teaching, study-visits to good schools. When they are sent to schools, they should work under supervision of experienced teachers.

Professional teaching certification. A new law has been drafted and submitted to the parliament. Under such Law, better qualified people will be recruited into the teaching profession, and those persons who are already in the teaching force will be required to upgrade.

WESTERN SAMOA

Background. Teacher education in Western Samoa began with the arrival of Missionaries during the last century (1830-1900) in an attempt to teach the Samoans how to read, write and reckon in the Samoans language. Samoans were trained to teach accordingly.

The German Administration (1900-1914) brought no significant changes, as government participation was restricted to a school for German children.

The New Zealand Administration (1914-1962) introduced the concept that education is a state responsibility and duty, and that the most democratic way of handling this was to make it secular. By 1920, the New Zealand Administration

had already taken over the Pastor Schools; and it was not until much later when a team, led by Dr. Beeby that any major changes for Western Samoa reached the planning stages.

With independence statehood in 1962, some exploration began into the Samoanization of the education system as divorced from introduced models, with the realization of a culturally Samoan-oriented type, appropriate to the local needs. In this respect, UNESCO assisted greatly by sending various survey missions followed by missions on curricula construction teams on various subject areas, such as environmental and language studies. It was then that the impact of the winds of change in curriculum innovation began to be appreciated within the society.

Issues

a) There is a wide gap between policy decision making and the implementation level.

b) Major curricula innovations are necessary to upgrade/update the educational system to reconcile it with modern changes, if the country is to keep up with modern educational developments; but at the same time enable the population to retain its cultural heritage and national identity within the forum of Pacific and Asiatic nations; and of course within the family of all nations.

Needs

a) The first and foremost need of national importance is the legislation for compulsory primary education.

b) Policy and practice on quality improvement and increase in quantity of teaching personnel are presently urgently needed.

c) The management structure for primary education is inadequately organized to guide teacher education institutes in accordance with the national development strategy. Rigidity and inefficiences in the schooling process result from absence of effective, central and incomplete planning.

d) Annual pre-service teacher trainees in-take are not always the best of school leavers.

e) There is an obvious need for staff regrading.

f) There is an emerging need if not an urgent need to recruit staff for the teachers colleges who have substantial backgrounds in educational studies.

g) Teacher education staff must be actively involved in the work of the Curriculum Development Unit so that curriculum changes and new methodology can be incorporated within their own teaching programmes. Involvement however should be out of lecturing hours.

Future plans

a) The first Samoan School Certificate examination is to be introduced in 1989.

b) By 1990 all Samoan students will sit the Samoan School Certificate.

c) In 1988, the two teacher education institutions are to be amalgamated.

d) The Form II examination is to be abolished in 1988.

e) The CDU and examination personnel will co-ordinate assessment practices.

f) The difficulties in implementing the present policy of teaching all subjects in English should be recognized.

g) A new policy should be drawn up regarding the medium of instruction.

Chapter Three

OVERVIEW: IDENTIFIED ISSUES AND NEEDS

Taking Stock

The year 1986 is the 40th Anniversary year of UNESCO. It is thus an appropriate time to take stock of the current position in a sector which is crucial to the work of UNESCO in the Asia-Pacific region – teacher education. It is also a time to define and agree on priorities for the period ahead. The last 40 years have seen profound changes and developments. No one at the beginning of that period could have predicted the situation for the region either in social terms or with respect to education. It would be equally futile to try to predict the future, even for a period as short as ten years. Yet there is agreement on the crucial needs as revealed both by the present situation and clarified by the human and social values which are held in the region. This must be the basis for statement of priorities.

The present situation is a mixture of both problems and possibilities. There are many concerns but there are also substantial strengths on which we can build. The Asia-Pacific Region currently has over three billion people, some 64 per cent of the world population in its 31 countries. Of that massive population 86 per cent live in developing countries. A significant advance, however, is recorded with respect to population growth with the annual growth rate decreasing from 2 per cent per annum to 1.6 per cent per annum in recent years. A high proportion of the total population is under the age of 15, some 35 per cent or one thousand million people being in this age group. In the years ahead the proportion of population under 15 will decline and that population bulge will work its way through. Traditionally the Asia-Pacific population has been predominantly rural and still some 72 per cent can be classified in this way. Urbanisation, however, is proceeding rapidly largely through concentration in a few mega-cities so that that rural population will be 57 per cent of the total by the year 2000.

The Asia-Pacific Region is particularly diverse. It includes the largest countries in the world both in terms of geography and in terms of population. It also includes some of the smallest. It includes land-locked countries surrounded by massive mountain ranges and island countries scattered over the immensity of the Pacific. It includes a substantial range of political ideologies, of religious affiliations, of cultural traditions, of stages of economic development. Some groups of countries have had universal primary education for many years, other groups have 80 per cent of their relevant population receiving primary schooling, and others range between 20 per cent and 60 per cent of their primary population in schools. Adult literacy rates also vary for the different countries from approximately 26 per cent up to 90+ per cent.

The region has seen substantial advances. While the age-group for primary education increased by 159 million in the period 1960 to 1982 the numbers in school increased by 188 million. In spite of this development the goal of universal

primary education (UPE) which was set in 1960 to be achieved by 1980 is a reality for only four countries in the region with another 13 countries approaching it. The problem of drop out from primary schools is still a major concern with some countries reporting proportions between 50 per cent and 80 per cent of the intake dropping out before they have completed. Particular groups suffer additional disadvantages. For example, female students are frequently under-represented and rural education is still a significant problem.

In secondary education and tertiary education we find the same pattern of significant advances accompanied by major concerns still needing resolution. Thus, for example, there has been a large attendance growth in secondary education but for most countries only a small proportion still receive such education. Equally significantly only a small proportion of those continuing on from primary schools are involved in technologically-based or vocational education. Precisely the same points can be made about tertiary education with respect to both numbers and emphases.

As the educational systems of the countries have grown, the numbers of teachers have shown similar increases. In 1970 the region had 14.1 million teachers and by 1982 this number had risen to 22.2 million. In general terms the overall shortages of teachers which were a feature of the 1960s and to a lesser extent in the 1970s, have now been overcome. There are, however, substantial exceptions to this, particularly with respect to specific areas such as mathematics and science teachers. The major current emphasis in teacher education is not so much on increasing numbers as on improvements in quality. The occurrence of substantial curriculum change and the certainty of further development, modifications in the process of assessment and the recognition of new needs with respect to school and community relationships are three of the areas which emphasise the need for qualitative improvement.

There are also factors which are beginning to make an impact on staff development needs for teachers in schools and educational personnel in general. Three of these factors deserve special attention. One is the growth of knowledge, especially in the area of technology. The second is the growing complexity of education systems and their stronger inter-relationships with government in general. This demands more sophisticated and more specific administrative skills and expertise. The third factor in change is the recognition that staff in higher education institutions likewise require special staff development to meet the needs of their own system and of society more generally. The assumption that specialised academic expertise is sufficient can no longer hold.

The educational issues are not merely issues for schools. There are currently 350 million young people of school age who are not in school. This is an increase of 100 million for this group from just 20 years ago. In addition to this group we have 618 million illiterate adults in the region and this number too has increased by 100 million in the past two decades. These are severe social problems in themselves but it is because of their association with so many other social problems that it takes on particular urgency. Raja Roy Singh speaks from his enormous experience of the region in making the following comment.

"Illiteracy is invariably associated with deprivation and socio-economic under-development. Countries with over half their adult population illiterate also stand at the low end of other scales of socio-economic indicators. Typically, with very few exceptions, these countries have:

- infant mortality rates of over 100 per 1,000 live births;
- one-half to two-thirds of their children undernourished;
- a life expectancy at birth under 50 years;
- widespread endemic and communicable diseases;
- one-third to one-half of their population without access to clean drinking water;
- half or more of their people with a household income below the poverty line or the minimum needed for meeting essential needs

A full analysis of the literacy situation is handicapped by lack of data but two groups of illiterates are readily identifiable. The first group comprises illiterate adults living in the rural areas. Recent estimates indicate that rural literacy rates are 10-30 percentage points lower than those for urban areas. In the rural areas, the incidence of illiteracy falls more heavily on the most vulnerable section of the population, namely, the rural poor, thus compounding the other social and economic disadvantages to which they are subject.

The second group comprises women. Of the estimated 618 million illiterates in the developing countries of the region, some 60 per cent are women. A reference to Table 23 will show that as long as there is illiteracy, there will be more of it among women than among men. (table not reproduced here) The difference is resolved when illiteracy is completely liquidated. The rate of women's literacy determines quite decisively the overall level of literacy in a country; a high rate of literacy is a positive influence on socio-economic development generally and on family life, children's education, health and nutrition, in particular." (Singh, 1986, pp. 89, 90)

Raja Roy Singh's comment on illiteracy also highlights the situation with respect to education of girls and women. As has been mentioned there is substantial under-representation in many countries for women in education and this has very serious implications both for the individuals who are disadvantaged and also for their families since, as has been pointed out, the overall literacy level depends very closely on the rate of women's literacy.

Population growth and illiteracy are two of the major problems which affect the current situation. The chief problem is unemployment and particularly the high levels of youth unemployment. Almost all countries in the region identified this as a major issue. The fourth problem area is the existence of substantial tensions and dislocations in social cohesion in the countries. This can be linked with rapid technological change and an associated decline in cultural transitions. It can also be linked with the disadvantages experienced by those in rural areas and the continued undisciplined growth of urban populations, through migration. Whatever the causes, most countries identified the need for moral education, for an education in values to promote both social cohesion and individual development.

It would be misleading, however, to indicate that the situation is dominated by problems. As is apparent throughout this discussion it also features very real

possibilities for desirable developments. Technological change is a case in point. While it is often discussed in terms of its harmful social impact, it is, by its nature a creation by people, a creation aimed to solve particular problems. As such it has transformed opportunities for travel, increased dramatically the means of communication, multiplied many times the region's means of productivity and substantially improved opportunities for a healthy life. Technology needs to be seen as the major asset it can be rather than as the social threat it has too often been allowed to become. A further area of desirable change is the reassessment of values which has accompanied the developments in technology and in society. This is not to imply that all value changes are healthy and desirable but that there is the opportunity in this reassessment to decide what is of lasting human value in society and to make decisions on the basis of these values. A third area of major potential benefit exemplified by the meeting is the phenomenon of co-operative effort sponsored by UNESCO through its APEID programme, in which people everywhere learn to work together to their mutual advantage. There has been a substantial growth in such effort in recent years at inter-government level, at government level, through voluntary agencies, through co-operation between interested institutions and individuals. Some of this effort has been misdirected and poorly guided; much of it has been beneficial and effective.

The past pattern of reactions to events has frequently been problem-oriented or even crisis-oriented. Countries have waited for things to happen and then tried to find solutions. The present task is to work together, not just to solve problems, but to prevent problems and to identify more and more possibilities for creative and desirable change.

Major issues for resolution

The national papers identify a number of issues for resolution, a careful analysis and evaluation of which leads to a coherent programme for future development. That programme needs to take account of initiatives and activities which can help on a regional or sub-regional basis and those which need to be focused at the national level. For ease of discussion, the issues are grouped under six areas.

1. Provision

a) What prior experience/qualifications should entrants to teacher education courses have?

   i) full secondary education?
   ii) science/maths for primary entrants?
   iii) experience outside school before continuation?

b) Selection – prior to course:
Academic grounds only – or personal qualities.

c) Selection – during course:
How to 'select-out' students who will be poor teachers or who have undesirable personal qualities.

d) Responsiveness:
Countries pass through different phases of need – i.e., overall need for

large numbers; needs in specific sectors of education and needs in specific training areas. Because of the time delay between recognition of needs and completing the selection and training of teachers, most systems respond too slowly to changed circumstances. How can they become more flexible?

2. Initial preparation

a) How can field experience be organised to provide good links between school and training institutions, good links between practice and theory?

b) How can teachers in schools be most helpful in this?

c) How can supervision be provided most effectively by the training institution?

d) Flexibility ~ specialization.
Can teachers develop greater flexibility without losing specialist skills? (eg. age-groups/subject specialization.)

e) Diversification of teaching approaches.

The predominant teaching method seems to be didactic, i.e. instruction to large groups with emphasis on imparting information. The broader purposes involved in school curricula seem to involve a broader range of teaching approaches. There are at least three different ways in which learning can take place.

i) by the acquisition of organised knowledge;
ii) by the development of intellectual and motor skills; and
iii) by the enlargement of understanding, insight and aesthetic appreciation.

The first method requires a didactic or instructional approach. The second involves learning how to do something rather than learning about it and involves coaching. The third method, where the mind needs to be engaged in the study of individual products and works of merit involves discussion of the ideas, values and forms involved. This is the heuristic or Socratic method of teaching.

A vital aspect for teacher education in all this is its exemplary role. It is vital that teacher education demonstrates the variety of approaches which it recommends, i.e., it practices as well as preaches.

3. Career development of teachers and other educational personnel.

a) Induction.

Students leave their training institutions and go to schools and find themselves under quite different pressures and influences than any they have been accustomed to. They are frequently told to forget what they have learned and concentrate on what is practical. How can an induction process relate their learning from preparation courses to their current experience in a productive fashion.

b) In-service education.

The initial preparation for a teacher is simply a basis on which to build. In what ways can schools and education systems develop career patterns which recognise the needs of teachers to keep learning and growing?

i) How can we best prepare for continued curriculum change?

ii) How can we take account of technological development?

iii) How can teachers keep close contact with their community and with social change?

iv) How can we increase the skills of self evaluation and the capacity to broaden and deepen continual teaching competence?

v) How can we meet the needs of particular teachers in the service who have had no prior initial teacher training, such as in the case with many secondary teachers in a number of countries?

vi) How can we make teachers sensitive to the continuing demands of moral education which are an inescapable part of every teacher's role?

Analysis of some trends in in-service teacher education

The development of methods for evaluating different types of in-service training are likely to draw attention to those that correspond to the demanding criteria of efficiency.

Analyses of the present models of in-service training allow numerous trends to be observed, such as the following examples:

i) The effort to increase the effectiveness of in-service teacher training includes its integration into a system which combines two other important aspects of lifelong education: the pre-service education of teachers; and the daily experience of their working lives. It is expected that through pre-service training teachers will acquire suitable techniques for their comtinuing self-esteem.

ii) Great attention is devoted to the creation and improvement of a system of incentives in order to make in-service training an integregal component of the professional life of teachers.

iii) A growing need is felt for the systematic preparation and further education of those who are involved both in the pre-service and in-service training of teachers.

iv) Another significant trend is the effort to involve teachers more in the decision-making process concerning the organisation of in-service training courses. Participation in decision-making is more strongly related to school-focused rather than teacher-focused in-service courses.

v) There is an evident tendency to focus the models of in-service teacher training more on the school. However, this does not mean the reduction of the teacher-focused models of in-service training. In the models of in-service teacher training the development needs of the school predominate. But this does not mean that these models should overlook the needs of particular groups or individuals within the school.

vi) The tendency to try out innovatory methods of in-service training is of increasing importance. This choice reflects new problems which confront education systems and/or society, such as environmental education, health education, international education, computer and information technology and the solution of other so-called global problems.

vii) Another trend is an increase in the duration of in-service teacher training and mainly concerns the period set aside for the practical application of theoretical knowledge. More profound research on the issues of in-service teacher training and its effectiveness would be desirable. Generally, in-service teacher training serves, either explicitly or implicitly as an instrument for change both in the education system and in society. (IBE, 1986)

c) What patterns can be developed for other educational personnel, including headmasters, curriculum advisers, administators and educational planners? Patterns need to be developed for their continuing education and development.

4. Teacher education personnel

Teacher education is a crucial area for educational change and development.

a) What patterns can we have for the strengthening of the quality of teacher educators themselves? They are frequently so busy in telling others how to change that they forget their own development needs.

b) What formal programmes do we need for the upgrading of teacher education qualifications?

c) What exchange processes do we need between the teacher education sector and other sectors of education and of government service?

5. Support services

a) In the strengthening of pre-service courses how can we develop high quality materials with an appropriate local emphasis?

b) How can teacher education contribute to the quality and variety of curriculum support materials, books, tapes, video and audio, film?

c) How can we develop an approach to the use of modern technology which is economically feasible and allows beginning teachers to keep in touch with what is happening at the forefront of technological development?

d) How can we provide research services both for schools and for teacher education which will

i) carry out investigations in the local setting;
ii) keep track of developments in theory and practical skills throughout the region and more widely; and
iii) provide comprehensive statistics and qualitative studies on social and technological changes.

6. System links and cohesion

a) Need to develop good liaison between teacher education and other education sectors.

b) Need to relate teacher education to national priorities in education:

i) social and moral policies;
ii) language policies; and
iii) cultural policies.

c) How to cope with system-problems which have an impact on teacher education:

i) lack of teacher support in rural areas;
ii) low social status of teachers; and
iii) low teacher salaries.

Regional and national initiatives to meet teacher education needs

To be developed from workshop.

1. Regional Initiatives;
2. Sub-Regional Initiatives; and
3. National Initiatives:

a) Workshops:

i) for professional/personal development,
ii) for materials/resources planning or production,

b) Individual programmes,
c) Exchanges,
d) Group programmes,
e) Inter-institution programmes,
f) Publications/resource programmes,
g) Research projects, and
h) Development projects.

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Chapter Four

INNOVATIONS IN TEACHER EDUCATION

One of the purposes of APEID is to promote the flow of information about innovative programmes in teacher education which the participating Member States in Asia and the Pacific have undertaken in the context of their needs and priorities. Such information flow will help those engaged in educational reforms to become more fully aware of the innovative activities being carried out in their countries and to share experiences with those working on comparable activities elsewhere in the region. In order to identify and document the innovative programmes, the Meeting culled out the innovative programmes in teacher education from the survey studies and discussed intensively the vitality and effectiveness, at national, inter-country and regional levels.

The summary of the innovations in teacher education, clustered in ten sections, namely: a) pre-service teacher education; b) teacher induction, c) in-service teacher education; d) specialized teacher training; e) teacher recruitment and admission; f) structural changes for teacher training; g) system links and cohesion; h) policy changes for teacher training; i) training for teacher educators; and j) research on teacher training, resulting from the three cycles of APEID activities are presented below:

Pre-service teacher training

Teacher Training raised to Institute Level. (Maldives)

School Experience (Observation in Schools) now a part of the Teacher Training Programme. (Maldives)

CCTV now used in micro teaching programme. (Maldives)

Teaching aids workshops during training course. (Maldives)

Three year B.Ed. Programmes established at the UPNG for training of teacher educators. (PNG)

Basic Skills courses for trainees in mathematics and English. (PNG)

New Zealand has established a number of "teaching outposts" where students are trained in ways which are more school based. Research seems to support the view that this is providing effective initial teacher training in the one year course for secondary teaching. (New Zealand)

In New Zealand 20 per cent of teachers' college positions are short term contracts to attract teachers and other specialists for the teaching field. The positions of these personnel are protected whilst in the Colleges. (New Zealand)

Teacher education

In the pre-service area graduate schools of teacher education have been set up, aiming at elevating the quality of primary and secondary school teachers through the exploration of practical sciences in primary and secondary education. This is seen as an effective response to the lack of practical training in many pre-service institutions. (Japan)

Provision of 'conversion' courses in the teaching of Bahasa Malaysia/English for Science and Mathematics graduate teachers to help overcome the shortage of Bahasa Malaysia/English teachers. (Malaysia)

Inclusion of a 'primary education package' in the training of lower secondary school teachers to make them more flexible in terms of development in schools. (Malaysia)

Introduction of 'integrated' courses in primary teachers education such as 'man and his environment' and 'manipulative skills' in response to the New Primary School Curriculum. (Malaysia)

Three Year Pre-service Programme for primary and secondary recruitment raised to age 18-23. There are 6 colleges of education at present and each college caters for about 5,000 students. In time to come, the number of colleges will be increased. (Sri Lanka)

The *Curriculum* of this Programme is newly developed to include new subject areas. (Sri Lanka)

The Staff newly appointed with higher educational qualifications. (Sri Lanka)

Evaluations continuous assessment, tests and exams are the main features. (Sri Lanka)

For *Teaching strategies* importance given to group teaching, group learning, self learning, simulation and microteaching. (Sri Lanka)

Special teacher education programme for special areas e.g. Plantation area and Mahaweli area. (Sri Lanka)

New subjects introduced in teacher education curriculum. Lifelong education, educational research, population education, community education, education-sociology, education-technology. (Sri Lanka)

Revising of the teacher education programmes for elementary and secondary school teaching. Both curricula have common general education component with emphasis on new thrusts of Philippine education; namely, humanism, Filipinism and social responsibility. Courses such as social philosophy designed to develop desired Filipino values have been included. (Philippines)

Integration of theory and practice in the professional courses through provision of more field-based experiences. (Philippines)

Emphases in professional education are strategies, instructional technology, and human development. (Philippines).

Teacher induction

Induction course for potential primary inspectors. (PNG)

Each school in New Zealand, which has a beginning teacher, receives an extra 0.2 effective full-time teaching position for the purpose of developing an induction programme for that teacher. (New Zealand)

All beginning teachers should be required to undergo one year of training immediately after their employment under the guidance of supervising teachers. The training should concern both actual teaching and other duties of teachers. (Japan)

In administering training for beginning teachers, each school should establish a systematic mechanism whereby the supervising teachers and all other teachers at the school will co-operate in the training of beginning teachers under the leadership of the principal. (Japan)

Specifically appointed supervising teachers should be assigned to schools where beginning teachers have been placed. Further, every prefectural government should develop an appropriate structure for administering in-service programmes, including the appointment of supervisors in charge of these programmes. (Japan)

Provision of a two-tier orientation programme for newly recruited teacher educators – at college and national level. (Malaysia)

In-service teacher training

There have been many developments in teacher education in Australia in recent years. The most significant has possibly been the adoption of a model of professional development under which teachers now undertake various in-service and other courses over the full length of their teaching career, either to update knowledge and skills or else in order to obtain additional formal qualifications such as a master's degree. (Australia)

Provincial centres for in-service networks. (PNG)

Production of in-service packages for distribution, together with the curriculum texts to schools. (PNG)

In-service refresher courses of 1 semester at both Teachers Colleges. (Western Samoa)

School based in-service teacher education is being done by individual schools under their own planning. There is a type of in-service education carried out by individual teachers for their own professional growth through attending advanced level schools or through their own independent study. In actual school-based in-service teacher education the following major premises should operate:

(i) teachers should be involved in the identification and articulation of their own training needs;

(ii) growth experiences for teachers should be individualised;

(iii) the single school is the largest and most appropriate unit for educational change.

A report entitled "Research to Inprove Teaching-Learning Practices" brought out by the UNESCO Regional Office of Education, Bangkok in 1984 has found that these principles were successful in practice, and had several advantages over the college based programmes. (Korea)

In Korea each Municipal and Provincial Board of Education, will, by 1989, establish in-service teacher education institutes independent of those attached to teachers' colleges. This will contribute to the enhancement of the quality of teachers. (Korea)

The most conspicuous change in in-service education in Korea for the past three years is the development and operation of programmes for educational administrators and professionals by the National Institute of Educational Research and Training.

This makes use of participation orientated instruction as opposed to the lecture dominated style. Techniques used here include seminars, work-shops, discussion with staff responsible for educational policies, simulation games for setting up future oriented educational and field trips. (Korea)

With the introduction of the in-service programme, given in section A, the conditional period of initial appointment for beginning teachers should be extended from six months to one year. (Japan)

A multimedia package consisting of print, video/audio, practical work was prepared for in-service education of primary school teachers in teaching science. The package was meant specifically for teachers in rural areas. Video and audio communications were extended to nearly 24,000 teachers in different languages separated over more than 1,000 kilometres. (India)

With the announcement of National Policy of Education, 1986, it was decided to orient all teachers for meeting the new demands. (India)

A comprehensive set of materials were prepared in module form by a large team of educationists/teacher educators. States made their selection to suit their needs and prepared packages for use in their own languages (thirteen). Orientation programmes were organised simultaneously in most parts of the country teaching nearly half a million teachers. Telecasts were made available with the help of satellite. Some of the States also arranged radio broad-casts. (India)

The exercise will be repeated for the next four years to reach to all teachers. Administrators were involved in all aspect of the programme. (India)

A programme has been on the air for several years now to support teaching of English. It covers both pupils and teachers. (India)

Multipurposes Technical Teachers Upgrading Centre (TTUC). (Indonesia)

The SANGGAR in-service training centre for mathematics, science and English teachers under the sponsorship of the World Bank. (Indonesia)

Open University is playing a more active role in in-service training. (Indonesia)

Provision of school-based in-service education aimed at orientating and updating teachers' knowledge and competencies related to the New Primary School Curriculum. (Malaysia)

Provision of an off-campus first degree programme at the Sains University of Malaysia, consisting of four years part-time and one year full-time instruction. (Malaysia)

Innovation in Teaching Personnel Development. The enchancement of "life-long learning" concept for in-service teachers. The changes from rigidity in the formality of in-service training has resulted in the establishment of a multi-level, multi-pattern network of in-service teacher education, e.g. short-term classes; single-subject training classes; spare-time studies; correspondence courses; radio-TV courses; audio-visual courses (samples of successful teaching); satellite programmes started from October 1, 1986; lecture-teams for teacher training; self-taught examination system; centres for teachers' advanced training; and post-graduate programmes for in-service teachers. (China)

Distance education which gives in-service training for about 10,000 teachers from 1983. (China)

The Curriculum Wing of the Ministry of Education developed a comprehensive project known as the National Teaching Kit Project (NTKP) through which 60,000 primary schools could be provided teaching kits for the improvement of primary education. This scheme envisages provision of teaching kits consisting of school subjects, particularly in science, mathematics, social studies and languages. These are tools and instruments to help teachers to produce inexpensive instructional aids through indigenous materials. (Pakistan)

Re-orientation/retraining of private school teachers of elementary schools conducted as joint projects of MECS, Funds for Assistance to Private Education (FAPE) and (PAFTE). (Pakistan)

Re-orientation of elementary school teachers for the New Elementary School Curriculum (NESC) and the New Secondary School Curriculum (NSSC). (Pakistan).

Development of Materials for re-orientation programme; training of national trainers; training of regional trainers; and direct training of teachers. (Pakistan)

Establishment of In-service Learning Centres for Teachers. (Pakistan)

Piloting of alternative models of teacher education through the Integrated Teacher Education Programme (ITEP) which was pilot-tested on a national scale and integrates relevant aspects of the elementary and secondary teacher education programmes. Its main purpose is to prepare prospective teachers to teach in both elementary and secondary schools; and the competency-based curriculum where the focus is on adequate preparation and educational management. The practicum-based teacher education curriculum involves a structured programme where students are required to undergo actual and active involvement with pupils and the community. (Pakistan)

Teacher education

The On-The-Spot (OTS) Primary Teacher Training Programme in which teachers undertake training at the in-service level in their local school using local materials etc. rather than having to go away to a teacher training college. This programme is undertaken under both the Education for Rural Development Project and the Primary Education Project. (Nepal)

Specialized teacher training

Training of Primary teacher educators overseas. (Maldives)

New Zealand has developed a structure of professional post graduate teacher qualifications as an alternative to academic study at a university but with the same salary recognition as university qualifications. The Advanced and Higher Diplomas are offered by distance study. (New Zealand).

Whenever necessary universities should be allowed to provide special one-year of half-year teacher education courses for university students and adult citizens, who are not earned credits in the required professional subjects but wish to obtain teaching certificates. (New Zealand)

Graduate Staff Development Programme of the C.D.C. (Pilot Programme) (Sri Lanka)

In Pakistan, distance education has been considered as a viable mode of quickly reaching masses of people in the remote corners of the country. The National Education Policy 1979 fully recognised the need for a comprehensive distance education system under the aegis of the Allama Iqbal Open University. The distance education approach in Pakistan is quite comprehensive in terms of the content areas e.g. general education, functional education, teacher education, adult education and continuing education. Teacher Education programmes of the Open University will go a long way in providing trained teachers for the rapidly increasing number of schools. (Pakistan)

The Primary Women Teacher Educator Training Programme which focuses exlusively on the teaching of science at the primary school level. (Nepal)

The Radio Education Teacher Training (RETT) Programme, a distance education programme which uses self instruction materials (SIMS). (Nepal)

Teacher recruitment and admission

To improve the mix of teachers the Department of Education uses television, radio and newspapers in its recruitment campaign to attract candidates into teacher training. The advertisements portray appropriate role models such as women teaching science subjects, Maori and Pacific Islanders as teachers and men teaching younger children. (New Zealand)

Attestation: Maoris may be awarded entrance to training (degree equivalence) if a tribal group will attest to the cultural and language suitability of the applicant. A national selection committee further selects those candidates it regards as suitable for a one year course of secondary teacher training. (New Zealand)

Extended first year intake into training has been considered to allow for a selection process during the first year. Students seen as unsuitable for teaching would have the opportunity to transfer to other programmes while retaining credit for the work they have done. (New Zealand)

Lowering of entry qualifications into teachers' colleges for minority groups such as candidates from the East Malaysian States of Sabah and Sarawak. (Malaysia)

Introduction of a three-stage selection process for candidates admitted into teachers' colleges – based on academic qualification, a scholastic aptitude test and an interview. (Malaysia)

Innovation in admission:

(i) A Recommended-Based Admission is being practiced in selected normal universities where a strong control is assured over the academic achievement, the development of morality, intelligence, physical construction, and the willingness of being devoted to the careers of education;

ii) The experiments of Oriented-Enrolment Programmes, in which the local bureau of education is authorized to select the candidates who have to be assigned to teach where they come from upon graduation;

iii) Recommended-Based Admission for normal school graduates to the teachers' colleges and normal universities on the condition that they have to come back and teach upon graduation. (China).

Innovations in Teacher's Recruitment and Promotion.
The practice of Contract-based Recruitment.
The establishment of promotion system.
The practice of teacher certification as a basis of recruitment. (China)

In order to meet the growing demand of teachers required to universalize elementary education in the country, "Education" has been introduced as an elective subject from Matriculation up to B.A. level. This method is likely to help in the production of a group of people who will be able to partially fulfil the teaching responsibilities in the schools. (Pakistan)

A major innovation in Thailand is in the area of provision: that is, in the procedures and criteria used for the selection of suitable applicants for entry to teacher education programmes. Two systems are used:

i) Selection based on the interviewing of those who want to become teachers in order to identify those who have attitudes and values that are regarded as appropriate for good teaching. These applicants are interviewed by a team consisting of practicing school teachers, and lecturers from the appropriate training institutions and,

ii) The sitting of an entrance examination in order to identify those students who have a good level of academic ability. There are three parts to this examination which covers the following areas: knowledge in the subject they are going to teach; their attitudes towards the teaching profession; and, their level of general knowledge. (Thailand)

Structural changes for teacher training

Relocation of C.D.U. at the in-service college. (PNG)

Amalgamation of primary and secondary colleges within the next two years. (Western Samoa)

School of Education as additional faculty at the new National University. (Western Samoa)

A proposal to overcome problems of lack of co-ordination between schools and teacher training is to establish a network between the university, the local government (Board of Education) and the schools. (Japan)

Establishment of the National Institute of Educational Management (NIEM) to conduct research and needs assessment, as well as to provide in-service courses in educational administration and programme planning and implementation. (Malaysia)

Establishment of Educational Resource Centres at the state level to provide facilities for teachers to upgrade their knowledge and teaching expertise. (Malaysia)

System links and cohesion.

Establishment of a Council for teacher education to co-ordinate the programmes of teacher colleges and the universities. (Malaysia)

Innovations in administration and management through the establishment of a Teacher Education Department under the State Education Commission. (China).

Innovations in Thailand include the following:

i) There are 36 teacher education institutions in Thailand, and these have been grouped into 8 clusters for the purposes of sharing resources. As a result, there is a more efficient use of teacher education resources in the country.

ii) In the various regions the different higher education institutions have engaged in a system of networking and have come together for the purposes of sharing research, staff development and extension activities.

iii) Schools have been clustered together for the purposes of providing in-service training for their teachers. This has resulted in the provision of programmes that are more relevant to the needs of teachers in the schools involved. (Thailand)

Policy changes for teacher training

Re-organization of the curriculum design and policy making structure. (Western Samoa)

Teachers are granted leave on full salary for the purpose of undertaking post-graduate training in teaching of the handicapped, teacher librarianship, guidance and counselling and reading recovery. (New Zealand)

The New Zealand public has been invited to participate in a review of the curriculum in New Zealand schools. 21,000 submission were received and the draft report contains a number of proposals for teacher education. (New Zealand)

More flexibility should be introduced into the teacher certification system with a view of enabling it to cope with the diversification of upper secondary school education, to attracting competent people to teaching positions in vocational and other practical subjects. (Japan)

Appointment of itenerant music teachers serving a cluster of primary schools, especially in rural areas to help overcome teacher shortage in this subject. The scheme has now been extended to remedial teachers. (Malaysia)

Maximizing the utilization of physical facilities in teachers' colleges by 'doubling' the yearly intake of students and extending working hours. (Malaysia)

Above all, there is a need of innovation in thinking, and to have an in-depth perception of the importance of teacher education in the light of the 4-modernization drive and the open-door policy. This is especially important in today's world of modern technology. Thus teacher education is regarded as a strategic measure in China's social, economic, and cultural reconstruction; and teacher education is given a high priority in (a) the distribution of finance, personnel, and facilities; (b) arrangement for capital constructions; (c) recruitment of teaching staff; and (d) admission of excellent candidates. (China)

In the light of the objectives of the Education Policy 1972-1980, the Curriculum Wing of the Ministry of Education launched a comprehensive programme to revise the curricula of the Teacher Education Programmes in the country. Many innovations, like the introduction of a Semester System of education, making Teacher Education a non-vacational programme and offering specialisation areas, have been launched through these revised curricula. (Pakistan)

Initiative taken by the government, particularly the Ministry of Education, Culture and Sports, to tackle issues and problems on a collaborative basis with professional organisations and institutions. For teacher education, curriculum development has always been done by the Ministry in collaboration with the Philippine Association of Teacher Education (PAFTE). PAFTE developed prototype syllabi for the new courses in the new curricula, as well as locally authored textbooks for these courses. "Policies and Standards for Teacher Education", passed in 1983 MECS Order No. 26 and revised as MECS Order No. 37 in 1986, was formulated through a series of consultative conferences, particularly with PAFTE. As for the general education and specialisation conponents, the Association of Philippine Colleges of Arts and Sciences (APCAS) was consulted. Some research grants for teacher education were extended to professional organizations by the Ministry. Joint conferences/assemblies between MECS and non-governmental agencies were

conducted to discuss issues and problems in teacher education. Re-orientation/ retraining of private school teachers from elementary schools were conducted as joint projects of MECS, Fund of Assistance to Private Education (FAPE) and PAFTE. (Philippines)

Granting of incentives and benefits to voluntary accredited schools. Voluntary accredited schools are schools which decide to upgrade themselves, not because they are forced to do so, but because they want to do so. Voluntary accreditation of schools is done by peers. Criteria of evaluation used is pre-established by the accrediting agency. Criteria are over and above the minimum requirements of the Ministry. (Philippines)

Accreditation is applicable to both public and private institutes. (Philippines)

Training for teacher educators

A Research and orientation programme has been going on in certain areas of teacher education such as microteaching and models of teaching. Teacher educators are given a basic orientation, helped to plan the work in their institutions and prepare reports (evaluation), which are desseminated to other institutions. (India)

A pilot project on performance appraisal of teacher educators is being conducted in some teacher colleges. (Malaysia)

Professionalization of teaching through the professional board examinations for teachers.

i) National Board of Teachers created.

ii) Passing of board examinations is now a requirement for the licensing for a graduate in education to teach in the elementary or secondary school. (Philippines)

Research on teacher training

Undertaking collaborative research between teachers' colleges and the universities on:

i) perceptions of the 'actual' and the 'ideal' teacher

ii) the relations between teacher attributes/qualities and skills and student behaviour in the class

iii) the usefulness and effectiveness of some foundation/professional courses in pre-service teacher education programmes.

Research conducted by the University Sains Malaysia on:

i) teaching practice-identifying a set of teaching skills and examining their characteristics.

ii) perceptions of head teachers/senior assistants regarding the placement and supervision of USM trainees. (Malaysia)

Chapter Five

REGIONAL NEEDS, ISSUES AND PLANS FOR ACTION

In Chapter Three the identified issues and needs were placed in the following categories:

i) Provision;
ii) Initial preparation;
iii) Career development of teachers and other educational personnel;
iv) Teacher education personnel;
v) Support services; and
vi) System links and cohesion.

These categories have been used as a basis for organising this chapter.

It should be noted that where countries are named as having developed particular innovatory practices, this is for illustrative purposes only. It does not imply that other countries in the region have not undertaken similar developments.

Provision

There is a general concern in the region with the supply and quality of entrants into teacher education institutions. However, there has been a tendency over recent years for standards of entry to be raised and for more specific academic qualifications to be required of applicants. Interviews form an important part of assessment procedures.

It is generally required that all applicants for training have completed secondary school education. There are, however, a few countries that accept applicants from primary schools to be trained to teach at any level of the Primary Schools.

Qualifications in mathematics and science at secondary level are widely required in the countries of the region. While mathematics and science are given importance in recruitment, some countries also place an importance on language competency.

Most countries in the region tend to select candidates for pre-service training on the basis of both academic qualifications and personal qualities, and a small number require work experience. Some countries administer entrance examinations and also require medical examinations before training. It is also noted that there are countries that select candidates on academic achievements only.

All countries have selection procedures during pre-service training, but a few countries are reluctant to terminate students. Supply and demand factors are responded to by changes made in age at entry, level of qualifications and duration of courses. Responses vary among countries.

Current ways of meeting needs. There appears to be considerable flexibility in national education systems to meet specific needs. Thus quick responses are able to be made. Malaysia and New Zealand, for example, have policies for increasing the numbers entering teacher training institutions from minority racial groups. Papua New Guinea has reduced the entry age for girls in order to help redress the imbalance between male and female students, and preference is given to female applicants from certain regions.

Some countries have placed considerable emphasis on the personal qualities of applicants and their motivation. This emphasis is evident throughout the teacher training courses, and responsibility for a student's progress is often placed in the hands of the staff of teacher training institutions. Countries use a variety of devices to encourage young men and women of good quality to apply. New Zealand makes use of print and electronic media and Pakistan has introduced 'Education' as a subject in senior secondary courses.

Current ways of meeting needs in provision. Current ways of meeting needs were not included in some of the national survey reports. The following were included:

CHINA

a) A Recommended-Based Admission is being practised in selected normal universities where a strong control is assured over the academic achievement, the development of morality, intelligence, physical constitution, and the willingness to be devoted to the career of education.

b) The experiments of Oriented-Enrolment Programmes, in which the local bureau of education is authorized to select the candidates who have to be assigned to teach where they come from upon graduation.

c) Recommended-Based for normal school graduates to the teachers colleges and normal universities on the condition that they have to come back and teach upon graduation.

MALAYSIA

a) Lowering of entry qualifications into teachers' colleges for minority groups such as candidates from the East Malaysian States of Sabah and Sarawak.

b) Introduction of a 3-stage selection process for candidates admitted into teachers' colleges based on academic qualification, a scholastic aptitude test and an interview.

NEW ZEALAND

a) To improve the mix of teachers, the Department of Education uses television, radio and newspapers in its recruitment campaign to attract candidates into teacher training. The advertisements portray appropriate role models, such as women teaching science subjects, Maori and Pacific Islanders as teachers and men teaching younger children.

b) Attestation: Maoris may be awarded entrance to training (a degree equivalence) if a tribal group will attest to the cultural and language suitability of the applicant. A national selection committee further selects those candidates it regards as suitable for a one year course of secondary teacher training.

PAKISTAN

In order to meet the growing demand of teachers required to universalise elementary education in the country, "Education" has been introduced as an elective subject from Matriculation up to B.A. level. This method is likely to help in the production of a group of people who will be able to partially fulfil the teaching responsibilities in the schools.

SRI LANKA

Three year pre-service programme for primary and secondary with recruitment raised to 'A' Level.

THAILAND

A major innovation in Thailand is in the area of provision: that is, in the procedures and criteria used for the selection of suitable applicants for entry to teacher education programmes. Two systems are used:

i) Selection based on the interviewing of those who want to become teachers in order to identify those who have attitudes and values that are regarded as appropriate for good teaching. These applicants are interviewed by a team consisting of practising school teachers, and lecturers from the appropriate training institutions; and,

ii) The sitting of an entrance examination in order to identify those students who have a good level of academic ability. There are three parts to this examination which covers the following areas: knowledge in the subject they are going to teach; their attitudes towards the teaching profession; and, their level of general knowledge.

Initial Preparation of Teachers

Introduction. The initial preparation of teachers is of crucial importance in teacher development and would reflect both the expectations which the community holds about the role of the teacher and the skills and abilities of those entering the course. Such an approach to teacher education supports the view, widely held in the Asia-Pacific region, that teachers have a significant social development function which is wider than a simple transmission of knowledge. The Summary Report from Sri Lanka points out that:

> The teacher is considered as a community leader, social agent, social reformer. The community expects the teacher's advice and guidance in identifying and solving their social and economic problems... 'School and community' is one of the core subject areas introduced under the Pre-service [programme].

It should also be emphasised that teacher development is a process which extends throughout an individual's career.

Background or general studies. Towards this goal the country papers have generally recognized three broad components of initial teacher education. These are:

i) background studies appropriate to the work of a teacher;
ii) pedagogical or professional studies associated directly with the activity of teaching; and
iii) the practicum or supervised classroom experience.

Background or general studies for teachers vary throughout the region depending, in a number of cases, on the entry level at recruitment for teaching. The importance of an appropriate level of background studies is emphasised, for example, by Sri Lanka. The country paper notes that: 'raising the educational level to Advanced Level is expected to contribute to the quality of teacher training'.

The Nepal study paper notes that teacher education might be perceived as associated with the country's developmental needs health education including food and nutrition, and population studies are important curriculum components in some teacher education programmes. Nepalese Studies are compulsory at the Proficiency Certificate level in all faculties of the university.

Another example of national or community development can be found in the Malaysian teacher education programme where introductory courses in such areas as Moral and Religious Education, Islamic civilization and citizenship studies provide a more general education background appropriate to the needs of prospective teachers in that country.

Other country papers also recognize the differential requirements of subject studies for primary and secondary teachers. Primary teachers are, in the main, considered generalists while secondary teachers are expected to be, as far as is possible in the context of each country's ability to provide, subject specialists in one or more teaching subjects.

It could be noted, therefore, that the background or general studies vary according to the entry level of candidates, the cultural context and the level at which teachers intend to enter the school system.

In a number of situations background studies provide the opportunity to improve the general educational level of teacher education students, particularly in the Primary sector. In these cases there is an emphasis on ensuring that students have a satisfactory level of performance in the areas of basic mathematics and language skills.

Theory and practice. Pedagogical or professional studies are common to most teacher training programmes outlined in the surveys and consist of courses related to human development, psychology, classroom management and curriculum or subject studies. Apart from the general issue raised in a number of country papers concerning the qualification level at entry to teacher training and the impact

this has on the trainee teacher's ability to deal with such educational concepts, the essential nature of this component for programmes of teacher education is recognized. The importance of basing these studies on research and current practice is noted. The Philippines country paper emphasizes the importance of research in highlighting a disjunction between the current methodology practised in teacher education programmes and appropriate teaching and learning styles that trainee teachers are expected to model.

There is no doubt that a major issue in teacher education programmes throughout the region is the mismatching of theory and practice. The practice teaching experiences are regarded in a number of cases as being too brief and undertaken with little relevance to the development of a sequential introduction to teaching and learning in the school.

Comment is made in a number of country papers on the deficiencies in the school system and this highlights the lack of good teacher models for those about to enter the profession. Even in countries where practice teaching is provided by teachers especially selected for the task, difficulties of finding good models in sufficient numbers are apparent.

In summary it is noted that the country papers reflect more of the activity in initial teacher training at the primary and secondary level rather than in the training of early childhood educators and those entering tertiary teaching. While a distinction is made between the depth of background studies required for those entering primary and secondary training it is generally accepted that the professional or pedagogical studies are an essential component of the region's teacher education programmes.

There appears to be concern about the linkages between college-based theory and school-based practice and the ability of the various school systems, and indeed teacher education institutions themselves, to model appropriate teaching behaviours for intending teachers.

There is wide variation in the length of training expressed in the country reports as a result of the entry level of candidates, the cultural context and the level at which the trainee expects to teach. At the same time, it would appear that there is a trend towards increasing the length of training. Against this trend is balanced the need for many countries to produce significant numbers of trained teachers, in particular, to support policies of universal primary education.

New initiatives in teacher education

Innovations in background and general studies. Since teaching is a process intimately tied to the culture of the community, the content of teacher education programmes must be responsive to expressed needs of that community. In a striking example of this belief, the New Zealand public has been invited to participate in a review of the curriculum in New Zealand schools. Over 21,000 submissions were received and the draft report contains a number of proposals for teacher education. In simple terms it seems that the key driving force in realising educational innova-

tion is national development. This principle which is expressed in all country reports has clear implications for both the content and the structure of teacher education programmes.

An example is the proposal, listed as an innovation from the Philippines, that both primary and secondary teacher education programmes have a common general education component with emphasis on new thrusts of Philippines education – namely humanism, Filipinism and social responsibility. In a similar way it has been proposed that the style of teaching pre-service courses be altered to ensure that future teachers have innovative thinkers and can make use of creative imagination in dealing with the challenges of education. This has been accepted as a guiding principle of teacher education programmes in China and many other countries.

This requirement that teacher education respond to community needs has caused conflict when the demands on training are greater than can be effectively dealt with in a given length of training. For example, one of the central issues in teacher education in Papua New Guinea is the balancing of the conflicting needs:

i) to provide a community based education for the 32 per cent of pupils who drop out before completing grade 6 and the 63 per cent who cannot continue into high school, and

ii) to provide an education of high academic quality for the 37 per cent who enter high schools.

Innovations linking theory and practice. It is a common theme of the country reports that teacher education institutions develop close links between each other and between themselves and the school systems which they serve.

The absence of such links in the past has led to many difficulties. For example, schools in Japan are often reluctant to receive students for practice teaching sessions because the Universities have not given careful consideration to the personal qualities of the student before they are sent.

This has meant that the availability of practice teaching is severely limited. In order to rectify this it is proposed that a network be established between the University, the Local Government (Board of Education) and the schools. The foreign of these links is a feature of a number of countries and has been successful in many of these.

In New Zealand 20 per cent of teachers' college positions are short term contracts to attract teachers and other specialists from the teaching field. The positions of these personnel are protected whilst in the Colleges. This procedure ensures that the content of teacher education courses is consistent with the practice in the education field. In addition, New Zealand has established a number of 'teaching outposts' where students are trained in ways which are more school based. Research seems to support the view that this is providing effective initial teacher training in the one year course for secondary teaching.

Related to this theme is the innovative scheme in Western Samoa whereby lecturers at the Teachers Colleges are represented on the curriculum development committees for schools. In this way the mismatch between College curricula and school curricula is avoided.

Improving responsiveness. Consistent with the view that the education of teachers must be seen as a continuing process, a number of countries have sought to develop links between the pre-service courses and the in-service programmes.

Rigidity in the specialisation of teacher training has also been seen to be a problem in a number of countries and there have been some notable attempts to overcome this through the development of links between primary and secondary training. Amongst these Malaysia has included a 'primary education package' in the training of lower secondary school teachers to make them more flexible in terms of development in schools, and Western Samoa is amalgamating the Primary and the Secondary college, while in Bangladesh there are moves to develop a common core curriculum between Primary and Secondary courses.

The development of these links has also been adopted as a way of maximising available resources for teacher education. Malaysia has looked at the sharing of personnel and physical facilities between colleges, and in Thailand the 36 teacher education institutions have been grouped into 8 clusters for the purposes of sharing resources. In addition, in the various regions, the higher education institutions have engaged in a system of sharing research, staff development and extension facilities. As a result there is a more efficient use of teacher education resources in the country.

The need for responsiveness in the content of teacher education programmes highlights a consequent need for flexibility in the structure of these programmes and in the certification procedures. This is seen to be necessary in a number of country reports and is reflected in the innovation in Malaysia that conversion courses in the teaching of Bahasa Malaysia/English be offered to Science and Mathematics teachers in order to overcome a shortage of Bahasa Malaysia/English teachers.

Similarly, in Japan it has been proposed that:

> More flexibility should be introduced into the teacher certification system with a view to enabling it to cope with the diversification of upper secondary school education, and to attract competent people to teaching positions in vocational and other practical subjects.
>
> Where necessary, universities should be allowed to provide special one year or half-year teacher education courses for university students and adult citizens who have not earned credits in the required professional subjects but who wish to obtain a teaching certificate.

In terms of the organizational structure of teacher education the requirement for community responsiveness has led, in a number of countries, to a move towards decentralization in college and university organisation and administration, curriculum planning and evaluation procedures in an attempt to foster greater sensitivity to local needs. As one example, in Sri Lanka special teacher education

programmes have been implemented in special areas, notably Mahaweli and Plantation.

It is clear that there are a considerable number of innovations in the area of initial preparation of teachers throughout the Asia Pacific region. A number of country papers have identified the need for careful evaluation of their effectiveness and the development of ways of communicating the results of such research to practising teachers.

Suggestions

1. It is recognized there is a tension between issues associated with teacher supply and demand, and entry qualification levels to teacher training programmes. National systems of education should recognize the importance of background or general studies in teacher training for the promotion of National or community expectations. Such studies will improve the level of teachers' general education and thus the quality of the teaching force.
2. To assist in the promotion of integrated primary and secondary programmes in particular, national systems should develop a core of studies common to both training programmes and, if possible, all sectors of teacher education.
3. The linking of theory and practice in teacher education should be reflected in schemes where institutional based training programmes are associated more closely with the work of schools. Staff exchanges and shared curriculum development activities are examples.
4. Encouragement should be given to evaluating the effectiveness of existing initial teacher education and training programmes.

Career development of teachers

Defining the issue. It is evident that the need for professional and career development for teachers, teacher educators, and administrative and support personnel, is desirable and necessary at personal, institutional and system levels. Basic skills must be upgraded and updated in order that teachers can respond to societal needs for improved standards of education and curricula. Teachers and teacher educators are expected not only to deliver established educational programmes, but also to initiate new and relevant teaching approaches in particular subject disciplines or for particular populations. They need the capacity to identify inadequacies, to develop innovative solutions or programmes and to implement and disseminate these.

Current patterns of provision

Induction programmes. In some countries there is already recognition of the need for newly trained teachers to be assisted and supervised during their first teaching appointment. They need the opportunity to consolidate their understanding of theoretical issues and their application of practical teaching techniques in a supportive and encouraging school setting. Schools are sometimes staffed to allow

time for some senior staff, selected for their exemplary teaching, to conduct induction programmes. Some education authorities provide senior officers responsible for the supervision and induction of recent graduates.

In some countries confirmation of the initial teaching qualification and/or professional certification are contingent upon satisfactory performance in the induction period.

In-service education – system based. It is recognized that teachers at all levels of provision (primary, secondary, vocational, non-formal ...) need regular opportunities for further study, for personal and professional growth in order that they can:

i) maintain commitment, motivation and a sense of professional collegiality;

ii) update knowledge and skills in response to technological and pedagogical development;

iii) be exposed to new curricula or new teaching materials, preferably before they are expected to introduce them into their classrooms;

iv) have access to re-orientation programmes if they wish to move into a different field of teaching or if national conditions require redeployment of members of the teaching force.

In-service education – school and cluster based. Schools have an obligation not only to deliver the agreed general curriculum to their communities, but also to develop the capacity to respond to the needs of particular communities and local conditions. In some education authorities there is a well-established support structure, providing funding for resource personnel and relief teachers so that schools can conduct consolidated activities in staff development. In others, schools conduct their own programmes independently and with minimal disruption to the routine teaching schedule. Such programmes commonly follow problem-solving processes. A suggested procedure might be as follows:

Step 1: Problem identification through needs assessment techniques such as surveys, casual interviews, observations and a systematic analysis of the school resources.

Step 2: Programme planning by representative school personnel.

Step 3: Programme implementation including preparation.

Continuing education. In response to a growing appreciation of the value of life-long education opportunities and, more particularly, the need for advanced and specialist skills in the various disciplines which contribute to an effective education system, teachers, teacher educators and administrators are encouraged to engage in continuing education to:

i) gain higher qualifications;

ii) develop specialist expertise (e.g. for literacy extension programmes, application of high technology, special education for gifted, disabled,

minority populations, science and technology, vocational education, non-formal education ...);

iii) develop planning, administration, management and service delivery skills;

iv) develop research skills;

v) maintain and augment leadership and potential leadership.

Continuing education is made available in a variety of ways and is usually highly dependent on priorities in budget allocation because both the provision of courses and means of gaining access to courses are high cost items. Some common practices are:

i) part-time studies at local or outside universities or colleges;

ii) full-time studies with or without financial support (scholarships, fellowships at local or overseas universities or colleges;

iii) 'open university' studies;

iv) correspondence and/or distance education programmes;

v) self-study accredited examination system (e.g. as developed and practiced in China);

vi) On-site teacher education using itinerant teacher educators (e.g. Maldives).

In some countries close links have been established between education authorities, university departments of education and colleges of education so that in-service and continuing education programmes might be negotiated according to local, provincial, state or national needs. Advantages of this include:

i) Participation is seen to be highly valued by the employing authority whilst being, at the same time, beneficial for individuals.

ii) Tertiary institutions are kept in touch with the realities of societal and community needs; and the perceived academic and professional capacities required not only to respond, but also to influence and initiate change.

Identified areas of need

There are, emerging from the review of current provisions, common felt needs which vary, for different countries, not so much in kind as in magnitude. They are as follows:

a) The need for the determination of priority and concomitant increase in funding, facilities and resources for in-service education. This should include the improvement in quality and quantity of teaching materials and induction to their use through:

i) development of multi-media packages modules, handbooks, and
ii) establishment of resource centres at regional levels;

b) The need for research into the evaluation of existing in-service programmes and their outcomes in terms of system development, teaching performance and student and community gains;

c) The need for revision of existing in-service programmes, curricula and teaching/learning strategies (i.e. adoption of adult teaching/learning models to complement traditional lecture/tutorial models);

d) The need for proper planning and implementation of in-service education programmes with increased teacher involvement in determining content and style;

e) The need for co-ordination among the various agencies involved in in-service education – e.g. universities, teachers' colleges, school systems, ministries or departments and other specialist or resource bodies;

f) The need to maintain close links and co-ordination between the programmes of pre-service and in-service teacher education;

g) The need for new programmes for in-service education, such as:

   i) computer science, community education, population education, health education, vocational education, music, arts and physical education, special education, and

   ii) studies particularly relevant to the work of teacher educators and administrators – e.g. values reorientation, research methodology, evaluation, curriculum development, programme planning and implementation, supervision, education administration;

h) The need for recognition of in-service training, achievement and teaching performance as requirements for maintaining teaching certification, promotion and salary increments; and

i) The need to regenerate commitment, motivation and performance levels of the teaching force especially among teachers of long standing through in-service programmes throughout their career.

Long-term goals

Each country should:

a) develop a general national programme of in-service education based on a systematically planned organisational structure, with clearly defined procedures and evaluation;

b) conduct research studies to establish baseline data for the formulation of effective policies and practices in the career development of teaching and support personnel; and

c) Try out alternative innovative models for in-service education, as well as continuing education, of teachers, teacher educators, and administrators.

Teacher education

Short-term goals

Each country should conduct research studies to determine:

a) priorities in the in-service programme that will require proportionately increased funding;

b) types of organisational structure and procedures suited to the needs of the system;

c) teacher success and effectiveness attributable to pre-service and in-service education; and

d) motivation/incentives for teachers to pursue additional studies or upgrading themselves through in-service education.

Each country should develop systematically planned organizational structures, procedures and evaluation models which will ensure:

a) integration and content continuity of pre-service induction and in-service education; and

b) integration and continuity of in-service education for all levels and sectors of the educational system.

Each country's Ministry of Education should adopt a mechanism by which the education system can establish linkage with government, non-governmental agencies and professional organizations for the:

a) improvement of teachers' status and remuneration;

b) development of content and approaches to in-service education; and

c) support of in-service training of teachers for their responsibilities in the area of community extension.

Each country should establish (if it has not already done so) an Educational Research and Development Centre for Teacher Education.

UNESCO member states participating in the APEID programme should establish Clearing Houses for examination and exchange of innovative programmes, resources and materials.

Suggested future initiatives

A guiding principle in considering initiatives which might facilitate attainment of general goals and specific objectives in professional and career development in the region is that of promoting the life-long education concept. Teachers, and the whole system in which they serve, have a responsibility to provide exemplary models for their communities in terms of striving for personal growth and the enhancement of, and access to, culture and environment for the benefit of all.

The following initiatives would assist in achieving the goals and objectives outlined above.

a) Regional/National re-orientation programme for teachers and teacher educators following a definite structure procedure and with inbuilt evaluation in stages:

   i) Development of needed instructional materials and modules by group of experts in the discipline, area or educational level for the re-orientation programme,

   ii) Training of national trainers,

   iii) Training of principals and supervisors,

   iv) Training of teachers, and

   v) Evaluation of each stage and on-going evaluation of whole programme, e.g. Thailand has developed system-wide in-service training programme in three stages:

      Stage 1: Training a core of teacher educators.
      Stage 2: Teacher educators conduct a training course for selected groups of their colleagues in their respective institutions.
      Stage 3: School principals organize in-service programmes for all teachers in their schools;

b) Adoption of a promotion scheme, based on additional educational qualifications (continuing education/graduate studies), performance and experience and a systematic mechanism to provide in-service education to beginning teachers before they are extended permanent appointment or professional certification;

c) Career development of administrative and support staff of educational institutions through management seminars;

d) Participatory planning of in-service programmes – administrators, supervisors, classroom teachers, subject-area experts, etc. – before plans are finalized;

e) Seminars/Workshops on values clarification and attitude re-orientation of teachers and teacher educators through a planned programme developed by educational philosophers, behavioural scientists and educators;

f) National and system-based units for advanced studies to provide courses in a variety of modes (e.g. correspondence courses, distance education, multi-media communication packages, periodic short residential programmes) for teachers to gain higher and advanced qualifications;

g) National awards and rewards in recognition of outstanding/meritorious performance of teachers as an incentive for professional development and high-level performance;

h) Establishment of national centres in-service/advanced professional training of all types of educational personnel;

i) Establishment of an APEID Clearing House for gathering and dissemination of innovatory professional development programmes, resources and materials; and

j) Establishment of international/regional association of teacher educators initially, but not necessarily, under the auspices of UNESCO (e.g. South Pacific Association of Teacher Education [SPATE] could be linked with Asian-Pacific Association [APATE]).

Teacher education personnel

As the teacher is the linchpin in a system of education, her/his preparation should logically be a matter of concern to any society. Education and the role of the teacher educator, as well as facilities required by them to organise relevant activities for teacher education, need some attention.

The group of teacher educators, because it is adequately educated in most countries and quite small in size, has never got the attention that the teachers have. Moreover, there is no other group that would criticize its shortcomings or offer assistance. The group has to depend on itself for its own improvement. There is a need for a searching look at what exists, what is needed, and what can be done.

An analysis of the situation as it exists in the countries in the region points up the following:

a) Little attention has been paid to the preparation of teacher educators. Specific programmes are not commonly available. Wherever these are available, they are inadequate for the high level of responsibility required. The problem is more acute with respect to the preparation of teacher educators for elementary education.

b) Policies regarding recruitment of teacher educators are not clearly spelt out neither in terms of required abilities, experience, aptitude nor any other needs arising out of national policies in general. Some examples of the latter are the induction of women or minority groups in respective countries.

c) As school teaching is a low priority area for able graduates, this, in turn, affects the quality of teacher education.

d) In some countries, teacher educators are recruited without having any (or sufficient) experience in schools, rendering their teaching bookish and theoretical. Even when recruited with experience in school, they tend to lose contact over time.

e) While continuously telling teachers to adopt more suitable pedagogy, modern approaches and techniques, teacher educators have frequently kept to 'talk', occasionally supported by 'chalk', communicating in the process that there is one set of ideas for being declared as having successfully completed a teacher education course, and another set of practices for real classrooms.

f) Joint responsibility for both pre-service and in-service education of teachers, is not very common. Relevant opportunities for learning, evaluation and improvement are thus lost.

g) Research is not usually considered part of the normal duties of teacher educators.

h) Induction programmes for teacher educators seem to be almost totally absent.

i) Teacher education institutions are more often than not poorly equipped and financed.

Several countries have paid attention to some of the problems mentioned above and have initiated action such as:

a) special comprehensive courses for the preparation of teacher educators;

b) setting up special centres to remediate the deficiencies in education of teacher educators, and conducting research; and

c) initiating special programmes for primary level teacher educators.

Keeping in mind current provision for the preparation of teacher educators, the following suggestions are made:

a) The roles and tasks of teacher educators should be clearly stated and kept in mind while recruiting personnel;

b) Programmes for preparing teacher educators should be specifically designed. Where personnel are selected/recruited from amongst experienced teachers, a substantial induction programme may be offered;

c) Preparation of teacher educators for the elementary teacher education institutions (as also pre-primary) needs special attention in several countries;

d) Teacher educators should be required to refresh their experience of school teaching periodically;

e) All practices, approaches and methods recommended to school teachers should be practised in teacher preparation programmes;

f) Pre-service and in-service education of teachers should be seen as a continuum with teacher educators participating in both simultaneously;

g) Teacher educators should be actively involved in preparation of learning packages both for pre-service and in-service education of teachers;

h) Evaluation of on-going practices and other action research should be part of the regular work of teacher educators;

i) Teacher educators need to interact with their colleagues in other faculties in the University and with their colleagues in the teachers' colleges. Work and resources may be shared where possible;

j) Institutional support, finance, time and infra-structure should be provided to facilitate the work and growth of teacher educators;

k) A reasonable teacher-student ratio should be established in teacher education institutions;

l) It is suggested that teacher educators have the opportunity to take advantage of technological changes in order to help improve the quality

of their teacher education programmes and their own performance as teacher educators. They are also preparing teachers to work in schools where these technological changes and facilities can have important impact upon the effectiveness of teaching and learning methodologies; and

m) Teacher educators have a responsibility to identify research needs and to initiate research in order to provide professional leadership, for instance, with regard to specific innovations such as values education, minority groups and technology.

Support services

No teacher education establishment, if it is to be successful in educating and training teachers to serve the needs of both the society and the individual, can function in isolation from the society in which it is located, and the various interest groups within that society. Teacher education establishments exist to help meet the needs of a particular society and a particular school system, and so need to be responsive to that system.

In order to accomplish these tasks and responsibilities it is essential that teacher education institutions be provided with adequate support services in the following main areas: curriculum support materials; personnel (including technicians and clerical support staff) with the range of skills and knowledge required by the training institutions; research and development data; and, modern technological services, along with supply, repair and maintenance facilities.

Each of these aspects of support service provision in teacher education will be examined in turn, taking account of the experience of the various countries in the region, as expressed in the regional reports:

Curriculum support materials. 'Curriculum support materials' means all those printed and other materials, including textbooks, posters, charts, audio tapes, video films, etc. which can be used in the education of teachers at both the per-service and in-service levels.

In most countries in the region most of the texts and other learning materials used at the pre-service level are produced by private publishers who commission works from authors in areas, and with an approach, which they believe will satisfy the needs and wishes of the teacher education establishments. At the in-service level, the curriculum materials are usually produced by the training institution itself, or by the education department in which the teachers are employed. The situation is similar in Thailand, while in Nepal the emphasis is more upon the production of curriculum materials by the teacher education institutions themselves. Although most training institutions rely upon private publishers to provide the curriculum materials used in their courses, this does not in any way inhibit their choice of content in these courses since the publishers are highly responsive to changes in the content and emphasis of the courses provided, and most of the authors who are commissioned to write these materials are themselves employed as teacher educators in universities and colleges.

One problem that does occur in this area is that most of the publishing houses produce materials for a mass market, and hence these may not be appropriate in terms of providing an adequate local emphasis. This problem in all three countries has been, in the past, most apparent when teacher educators have had to largely rely upon curriculum materials developed in other countries and regions such as the United Kingdom and North America.

Personnel. The quality of teacher education programmes depends upon the quality of those who are employed to educate the teachers, the educational administrators, technicians and clerical support staff. In many countries in the region, such as Nepal and Thailand, most of the teacher educators are university graduates who may themselves have little practical experience in schools. The reason may be that they are largely selected on the basis of their academic background, and so many of their courses are overly theoretical in nature, and the credibility of the staff involved suffers due to lack of adequate teaching experience.

This situation is not true in all countries. For example, in Australia, with very few exceptions, those who are employed as teacher educators must themselves have a history of successful teaching in schools, plus post-graduate qualifications in their particular area of teaching. However one problem that does arise, is that once they are appointed to a college of education or university, the staff involved are not required to return to schools to build up further experience, and so with the passing years tend to become more and more remote from the realities of the school environment. At a time of rapid educational and social change when schools are in a state of flux such teacher educators may become increasingly out of touch with the realities of the teacher's task.

In referring to the importance of personnel support facilities for teacher education it is important to note that we are not just referring to the actual teacher education lecturers, but also to the other support staff such as technicians and clerical staff who have an important role to play as 'back up' staff. In addition, in order to free lecturing staff to undertake their teaching and assessment duties, there is a need for 'teacher aides' to undertake the more routine non-teaching tasks associated with the work of teacher education.

Research and development data. Research data is essential for the purpose of both planning and programming teacher education activities. It is, for example, necessary to have information on teacher demand both in a general sense and in particular subject areas. In addition it is necessary that training institutions and education departments are aware of the developments that are occurring in schools in order that they can be responsive to these when designing the content and approaches to be adopted in the programmes developed. This is important at the pre-service level, but also at the in-service level in order that courses are developed to upgrade and update the knowledge and skills of teachers.

Research is also required to enable teacher education institutions to evaluate the effectiveness of their programmes in order that they actually achieve what they are intended to do. This is an area which is often overlooked with the result that many teachers claim that their teacher education courses are overly theoretical and incompatable with the realities of the school and classroom.

Technological facilities. Technological development over the past few decades have been such that traditional teaching methods, materials and other support facilities have in some cases changed dramatically. Developments include such technologies as computers, overhead projectors, word processors, calculators, radio, and television. Although these technological developments are available to teacher educators in many of the countries in the region, it must at the same time be remembered that their availability and acceptance is not universal in all countries, particularly those where the material resources are not available to take advantage of these new technological developments.

In Australia a system called 'interactive television' has been used as part of the in-service education of teachers. This is a system whereby teachers working in widely scattered geographical areas are able to participate in teacher education programmes which are run from one centre. In Tasmania, teachers living in all parts of the State have been able, through a television hook-up, to take advantage of the professional development programmes run from the Centre for Education at the University of Tasmania. In Thailand television is used as part of their highly successful Open University system to enable teachers living in various parts of the country to upgrade their teaching qualifications. The use of radio has occurred in both Thailand and Nepal as a part of the distance learning projects adopted in both countries.

These are just two examples of the substantial impact of technological change on the methodology of teacher education and one can also think about the substantial potential impact of other technological changes such as computers on the methodology of teacher education.

Equipment: supply, repair and maintenance services. In most of the countries of the region many teacher education institutions have a short supply of scientific equipment and, even if available, they are not kept in a workable state. This is primarily because of the lack of necessary facilities for their supply, repair and maintenance.

Suggested responses for improved support services

Curriculum materials. There is a need to develop a greater diversity of materials for use in teacher education because teachers are not educated and trained to work in one type of school or one type of community. For example, the range of skills and knowledge required of a teacher who is going to work in a rural or isolated region is likely to be in many important ways different from the requirements of those who are going to work in inner-city schools; and the professional needs and skills of those who are going to teach in very poor or economically impoverished communities are likely to be different from those who are going to work in more affluent areas. Thus we have a heterogeneous rather than a homogeneous community to cater for. The development of curriculum materials must therefore take into account this important fact. This is an important gap in the production of 'mass' curriculum materials by the commercial publishers. The development of these curriculum materials may be improved in an economically

realistic way through some resource sharing and joint curriculum writing and sharing schools and higher education institutions that serve a similar group of teacher education students.

Personnel. It is essential that teacher education institutions recruit the most talented teachers, in the appropriate numbers, to contribute to their teacher education programmes. Thus there are both quantitative and qualitative considerations to take into account. In addition it is essential that those who are engaged in the training of teachers have some experience themselves in working in schools and are therefore not just concerned with examining education from a purely theoretical stance. In order to further help bridge the theory/practice gap, and to ensure that teacher educators are in touch with recent developments in school systems, they should be encouraged to have some personal contact with schools as part of their professional role. One way to achieve this is to have a certain proportion of contract positions which are filled by teachers who are seconded to training institutions for a certain period of time: say, up to four years. This is particularly important in the area of teaching methods and helps to ensure that student teachers are being instructed by those with recent experience in schools. However, it is important to recognise that a situation where some teacher educators are seconded from schools for a set period of time is not without its problems. For example, this may be something which the teacher unions and associations may not favour, and the system is not likely to be popular with teachers unless it in no way inhibits their career and promotion opportunities when they return to the school system after their period of secondment. Facilities and career opportunities in teacher training institutions need to be further improved in order to attract the most talented teachers to work in them.

Research and development data. Authoritative research activities should be undertaken in order to ensure that comprehensive statistics are gathered to improve the accuracy of teacher supply and demand forecasting. In addition research monitoring needs to be undertaken in order to help improve the effectiveness and quality of teacher education programmes, and in particular to help insure that teachers are actually being trained in the knowledge and skills required in the school system. When evaluating the application of innovative measures adequate assessment should be undertaken to ensure that the desired goals are achieved. In addition, research studies on the performance of teachers in schools and on new techniques of teaching and learning methods are suggested.

Technological facilities. It is important that teacher education institutions are up-to-date regarding the use of the new technologies, such as computers. This is to ensure that all students are acquainted with the impact of technological developments on their work in the classroom, and to ensure that they have sufficient knowledge in this area to prepare their pupils to take their place in a society where technological change is the norm. Teacher education should also take advantage of technological advances in their own work especially in terms of their impact on the efficiency of teacher education programmes.

Equipment: supply, repair and maintenance services. It is essential that suitable facilities are available for teacher education institutions to procure, maintain

and where necessary repair the various items of equipment they need to use in undertaking their teacher education responsibilities.

In this section we have sought to explore key aspects of the issue of support services for teacher education. Having identified major aspects of the problems in this area, we have then, drawing upon the experience of countries in the Asian and Pacific region, suggested possible solutions and developments in this important area to ensure that the full potential is realised. In doing this we have sought to avoid a theoretical approach, but have instead taken account of administrative constraints and structures which may either facilitate or hinder such changes. Indeed, above all else, sufficient funding must be provided in order to ensure that the various support facilities discussed in this paper become a reality.

Chapter Six

SUGGESTIONS AND CONCLUSION

Education systems in the region have undergone enormous changes in the recent past and more fundamental reorientations are being planned for the future. As a result, the national education systems need to have effective infrastructures for developing, mobilizing and expanding their human resources. In this context, professional support services and education and training of educational personnel have assumed a high priority in the participating Member States.

The project activities for teacher education are designed to contribute towards the training of educational personnel and development of professional support services, particularly through designing of alternative structures and training methodologies and development of guidelines, methodological manuals and exemplar materials for the delivery of professional support services. Special attention may have to be given to strengthen the networks of institutions for in-service as well as for pre-service of teachers and educational personnel to develop new competencies, and skills, values required for training of educational pesonnel. Attention may also have to be given to the training of personnel through a realistic recognition of strategic development tasks for training of educational personnel, and careful study and action based on an understanding of the issues and a determination to find resolutions in ways that are consonant with the central values of the society.

Having considered the national reports on teacher education and the current innovations in teacher education arising from the first three cycles of APEID programmes for all participating countries, the Workshop recommends that the following suggestions be considered for inclusion in the fourth cycle of APEID programmes. These suggestions are made in relation to national, inter-country and regional initiatives and activities.

A number of suggestions have been given in Chapter Five; Regional Needs, Issues and Plans for Action. The following proposed developments are summarized below:

1. a clearing – house for disseminating information on innovatory professional development programmes, resources and materials;
2. a regional association of teacher educators;
3. strengthening of national centres for advanced training of teacher educators;
4. seminar/workshops on values and moral education;
5. workshops on the development of positive attitudes and approaches among teacher educators;
6. management workshops for the career development of support staff in teacher education institutions;

7. workshops for teacher educators on the provision of in-service education for beginning teachers;
8. programmes for teacher educators on the development of instructional materials and resources for teacher training curriculum development, testing, monitoring, assessment and evaluation;
9. programmes for teacher educators on the development, supervision and evaluation of teaching practice at both pre-service and in-service levels;
10. workshops which explore approaches to the participatory planning of in-service programmes;
11. a series of workshops and conferences on possible ways of providing suitable programmes and incentives for teachers to gain higher and advanced qualifications in the areas of knowledge and professional practice;
12. programmes to establish the range and nature of the support services needed in teacher education institutions and in schools, in general, with a view to designing suitable training programmes, materials and resources;
13. a sharing of approaches to attract the best qualified and most suitable students to teacher education programmes;
14. collaboration on ways and means that teacher educators use to remain up-to-date with current classroom practices;
15. a concerted effort to explore and establish effective procedures for research in teacher education;
16. the research role of the teacher educator;
17. the planning of programmes according to the continuum for pre-service and in-service teacher education;
18. the contribution of teacher educators to the development of learning packages and materials;
19. workshops on the evaluation of on-going teaching practices and action research;
20. conferences which help teacher educators become knowledgeable and skilful in the use of a wide range of educational technologies;
21. the study of the recruitment and selection of teachers;
22. the study of teacher induction programmes;
23. the study of approaches to linking changes in school curricula with corresponding changes in teacher education curricula.

It is clear from the survey, and from the discussions at the Workshop, that there is already a great deal of valuable activity at the national level in teacher education. In addition to this, a variety of worthwhile regional initiatives have operated through APEID and the activities suggested above build on this sound basis.

Annex

SURVEY OF TEACHER EDUCATION

This survey is intended to help the Member States to establish a status position, in quantitative and qualitative aspects; create a knowledge base and an inventory of selected growth points in the countries of the region in critical areas of common concern to groups of countries.

The results of the survey are expected to be useful to the countries as the bases for formulating individually and collectively, approaches for the further development of teacher education in ways that would be supportive of, and inter-related with their future plans and crucial programmes of educational innovation and reforms.

The methodology and design of the proposed survey is intended to be used flexibly. The various items in the form will, it is hoped, be interpreted by the national authorities to suit the national context. They may be amplified so that the information added makes the presentation fuller. However, the basic structure, for purposes of comparison, and the overall purpose of the exercise, it is urged, should be maintained.

Details about the proposed survey are presented in three sections and the survey questionnaire is attached in the annex.

Section I: General

1. Explanation of terms
2. Rationale and conceptual framework of the study
3. Specific outcomes of the study
4. Methodology

Section II: Design of Survey

1. Status survey
2. Additional studies
3. Suggestions for future activities
4. Synthesis of national studies

Section III: Findings and recommendations

Appendix: Survey Questionnaire

Section I: General

This section covers the explanation of terms used such as teachers and teacher education, the rationale and conceptual framework, specific outcomes of the study and methodology for the survey.

Teacher education

1. Explanation of terms

1.A Teacher

In view of the broadened concept and scope of education, in covering formal and non-formal modes of teaching-learning, the term 'teacher' would include:

a) Teachers of primary and secondary schools
b) Teachers working in non-formal education programmes
c) Teacher educators/trainers of teachers

1.B Teacher Education

This term has three aspects: when and where teacher education takes place and what it covers.

1.B.1 Teacher education is a function that takes place in:

a) Pre-service education
b) Induction
c) Staff development
d) In-service education
e) Continuing education

1.B.2 All the above components will include the role and function of teachers in the school, as well as outside the school, in respect of the community and the nation at large.

2. Rationale and conceptual framework

Member states are presently engaged in significant reforms and revitalization of education. Teacher education is a major input to all educational reforms and development and hence the need to reorientate and revitalize teacher education programmes for preparing the necessary teacher manpower for educational and national development. The Member States are already convinced of the need for improved and expanded education of the teaching personnel. Within the limit of their resources and felt needs in the realm of teacher education, each has undertaken some innovative development whether on a systematic or adhoc basis, on a large or small pilot scale. There is need to know and share what these innovative thrusts are, what experiences they have generated, and what problems remain to be tackled. People working on problems like teacher inadequacy and ineffectiveness under different situations, can make significant contributions to the general understanding of the problems and issues.

Considerable research material is available in international and/or national languages, and it needs to be fully tapped for developing and testing of ideas, practices and programmes in teacher education. Moreover, education exists in a very complex set of socio-political and cultural settings at micro-levels. Some of the important determinants are qualitative and subjective. Micro-ethnographic studies — of schools, teachers, teaching situations, student-home-school relationships,

perception of good schools, home and teachers – are, therefore, important and complementary to empirical research.

3. Specific outcomes of the study

a) Presentation of the status position of teacher education in each country with the help of primary and secondary sources.

b) Identification of growth points and gaps in teacher education programmes and their analysis in terms of factors and forces involved in diversities and complexities of situations in which they operate.

c) Identification of innovative ideas, programmes and practices in teacher education initiated in different countries which need support for fuller development.

d) Spelling out of newer and more dynamic ideas and practices for induction in the system of teacher education to make it more responsive to the national needs and aspirations.

e) Developing insight into the causes of success and failure of innovative ideas and practices, and into the aspirations aroused and achieved with the help of selected ethnographic studies.

4. Methodology

The basic tool for the survey is the questionnaire contained in the annex. In addition visits, observations, interviews and small case studies may be undertaken to add to or authenticate the information derived from other sources.

Section II: Design of Survey

The design covers several distinct but inter-related exercises (for teacher education as delineated in 1.B.1 of Section I) as under:

1. Status Survey

This includes:

a) needs assessment,
b) resource and contextual analysis,
c) capacity analysis (in terms of intake, demand and supply of teachers),
d) performance analysis,
e) policies, problems and plans,
f) growth points and gaps, and
g) teacher induction.

2. Additional Studies

These include:

a) Studies on effectiveness of teacher education, and
b) ethnographies (Refer Section 1 part 2, paragraph 2)

2. **Suggestions for Future Activities**

4. **Synthesis of National Studies**

Section III: Findings and Recommendations

The findings and conclusions of the survey to be presented under the headings suggested in Section II: Design of Survey. The findings and conclusions should bring out prominently, growth points and felt needs in respect of each area of teacher education. The headings may include:

1. **The status of teacher education**

a) Needs assessment.

This may include information about the needs of the various forms of teacher education.

b) Contextual and resource analysis.

This would show what financial, physical and other resources are available to teacher education, and why they are what they are.

c) Capacity analysis.

Here information will be given about the qualifications and pre-entry education required of potential teacher trainees and of teacher educators, as well as about the supply and demand position in respect of teacher educators and teachers.

d) Performance analysis.

Here will be information about practices for evaluating teacher education programmes and the extent to which institutions and other agencies engage in such evaluations.

e) Policies, problems and plans.

This section will contain information about policies and plans to alter the nature of teacher education and to enhance its quality, as well as about the guiding principles associated with these proposals.

f) Growth points and gaps.

Here will be information about significant growth points and gaps in teacher education, and about the complex societal factors and forces associated with them.

Growth points would include significant new developments and could cover initiatives that have been taken with respect to:

- school-based in-service education
- teacher education

- staff development
- distance education for teacher education

As well, there will be information on how various new initiatives and on-going activities in teacher education take account of:

- pre-promotion training for potential head teachers
- the role of teachers in networking of school clusters
- the role of teachers in raising achievement levels of primary pupils

This section will also identify innovations that deserve support.

g) Teacher induction

This section will contain additional information about teacher induction practices and about any new, dynamic initiatives.

2. Additional Studies

The following two sections will contain information about studies on the quality and effectiveness of teacher education, and on measures to increase the effectiveness of teacher education programmes. The information will be reported under two sub-headings:

1. Effectiveness of teacher education, and
2. Ethnographies of teacher education

3. Suggestions for future activities

This final part is to contain suggestions about the directions that should be taken by future activities or developments in teacher education as well as suggestions for future investigations of teacher education.

SURVEY QUESTIONNAIRE

An instrument designed to gain information about the current status of teacher education, in qualitative and quantitative terms, in order to create a knowledge base about areas of need, growth and innovation.

A. STATUS SURVEY

I. Needs Assessment

In this section, information is sought about the needs of the various forms of teacher education and whether country-wide or local information has been obtained about them.

1. Have any local or national surveys of the needs of teacher education (i.e. in-service, staff development, etc.) been conducted in the past five years? If so, please name three to five of the most significant ones and in about 200 words summarize their findings.

2. If there have been no needs surveys of teacher education please indicate what you consider to be the most crucial needs.

3. Please identify the most important basic, community and national development needs in your country.

4. Describe the extent to which teacher education programmes (in-service, pre-service, staff development, continuing education) take account of these crucial basic, community and national development needs.

II. Contextual and Resource Analysis

In this section information is sought about the financial, physical and other resources available to teacher education, and about some of the reasons why these are what they are.

1. What proportion of your country's education budget is allocated to teacher education? Also, please indicate the proportion of that allocation that is available for resources other than staffing.

2. Please provide a brief picture of the financial constraints or otherwise on teacher education vis-a-vis the financial position of other nationally funded agencies or programmes.

3. What resources (e.g. physical, financial, manpower, etc.) do you regard as the most crucial for teacher education in your country?

4. What are the most critical resource deficiencies for teacher education in your country?

5. Are there any schemes or programmes in your country for the sharing of resources for teacher education in order to offset some of the deficiencies? If any, please describe a few

6. In particular, do teacher education institutions share resources for teacher education (i) among themselves, (ii) with schools, (iii) with universities and other institutions for higher learning and (iv) with other community agencies?

   If so, please describe how this occurs in your country.

7. If no sharing of resources occurs at present, what plans, if any, are there for it to occur?

III. Capacity Analysis

In this section information is sought about the qualifications and pre-entry education required of potential teacher trainees and of teacher educators, as well as about the supply and demand position in respect of teacher educators and teachers.

1. Are there specific provisions and programmes in your country for the training of teacher educators? If so, please give a few examples.

2. With respect to your country's requirements for teacher educators, are there adequate numbers of qualified persons available for posts in (a) primary and (b) secondary teacher education programmes?

3. Are there any mismatches between the qualifications of these persons and their teaching assignments? If so, please give examples.

4. Please identify the areas in which this mismatching is most acute in your country.

5. Where there are shortfalls, for example in staff with certain specializations, what arrangements, if any, are made to overcome them?

6. What steps, if any, are taken in your country to upgrade teacher educators in their particular specializations (e.g. in subject and pedagogical areas)?

7. What plans, if any, does your country have for meeting future requirements for teacher educators (e.g. with respect to qualifications, numbers specialization)?

8. Are adequate numbers of teachers being trained to meet the requirements in your country for

Primary education:	Lower grades?	Yes	No
	Upper grades?	Yes	No
Secondary education:	Lower grades?	Yes	No
	Upper grades?	Yes	No

9. For those sections to which your answer was "yes", please describe the extent to which supply exceeds demands.

10. For those sections to which your answer was "no", please describe the extent to which the supply falls short of the demand and indicate specific areas where the shortfall is greatest.

11. Where a shortfall exists between supply and demand, are any steps taken to meet it? Please give examples.

12. Various qualifications can be required of trainees preparing for primary education, for example, a complete secondary education or less, or other things, such as work experience, certificate courses, special considerations, etc. . .Please indicate, in those terms, the kinds of entry qualifications required in your country for trainees preparing for primary Grades 1 to 3, 4 to 6 and (if applicable) 7 to 8.

13. Various qualifications are also required of trainees preparing for secondary education, for example a complete secondary education or less, or other things, such as post secondary certificate courses, university degree, work experience, special considerations, etc. . .Please indicate, in those terms, the kinds of entry qualifications required in your country for country for trainees preparing to teach in the secondary Grades 7 to 8, 9 to 10 and 11 to 12.

IV. Performance analysis

In this section, information is sought about practices for evaluating teacher education programmes and the extent to which institutions and other agencies engage in such evaluations.

1. Please describe the formal and informal procedures or mechanisms, if any, in your country for evaluating teacher education programmes (in-service, staff development pre-service, etc.).
2. Have any significant evaluation studies (e.g., surveys, case studies, etc.) been conducted in your country? If so, please name two or three and give a summary of their most salient findings.
3. Have there been any evaluation studies in your country about the quality of staff input teacher education programmes? If so, please name two or three and give a summary of their most significant findings.

V. Policies, problems and plans

In this section information is sought about policies and plans to alter the nature of teacher education and to enhance its quality, as well as about the guiding principles associated with these proposals.

1. Are there any institutional, regional and country-wide proposals to alter the nature and/or quality of teacher education (i.e., pre-service, staff development, in-service, etc.)? If so, please summarize them and give examples of the two or three most significant ones.
2. Are there any predicted or anticipated problems with respect to these proposals? If so, what are they?
3. Are any steps being taken or envisaged to offset these problems? Please describe two or three of the most significant ones.
4. If there are no proposals to alter the nature and/or quality of teacher education, are there any generally accepted ideas about what ought to be done? If so, please mention two or three.

VI. Growth points and gaps

The purpose of this section is to obtain information about significant growth points and gaps in teacher education and about the complex societal factors and forces associated with these.

1. Describe briefly the important features of two or three significant initiatives that have been taken in the past three years with respect to:
   (a) school based in-service education
   (b) teacher induction
   (c) staff development and
   (d) distance education for teacher education.

2. Have any initiatives been taken in areas of teacher education other than the four specified above? If so, briefly describe in about 300 words two or three of these.

3. Are any other initiatives in teacher education being planned, or about to be implemented in your country? If so, please provide some brief details of two or three.

4. Do any of the preceding initiatives you have mentioned, or any on-going activities in teacher education take account of (a) pre-promotion training for potential head teachers, (b) the role of teachers in networking of school clusters and, (c) the role of teachers in raising achievement levels of primary pupils? If so, please provide a few examples on how each is done.

5. In order to ensure satisfactory implementation, there may be some specific initiatives or innovations that require support in terms of:–

   (a) programming and management,
   (b) expertise,
   (c) physical facilities, or
   (d) finance.

   If applicable, please name about three that you consider deserve such support.

6. Describe briefly some of the most crucial deficiencies in teacher education (i.e., pre-service, staff development, continuing education, etc.) in your country. In your description please identify the factors or forces affecting their existence.

VII. Teacher Induction

In this section additional, or qualifying information is sought about teacher induction practices in your country and, in particular, about any new, dynamic initiatives.

1. What initiatives are taken to induct beginning teachers into their job? Comment briefly on a few.

2. What other steps do you consider should be taken to make induction more effective? Comment briefly on two or three.

B. ADDITIONAL STUDIES

The purpose of the next two sections is to obtain information about studies in your country on the nature, including the quality and the effectiveness, of teacher education (e.g. in-service, continuing education, staff development, pre-service, induction).

I. Effectiveness of Teacher Education

A. In recent years has any research been carried out in your country on the effectiveness of training programmes in bringing about changes in

trainees' professional competencies, attitudes, etc? If so, please indicate the most significant outcomes from some of the relevant studies.

B. Whether or not effectiveness studies have been undertaken, please describe any measures that have been taken, or are proposed to increase the effectiveness of teacher education programmes.

II. Ethnographies*

1. Have any ethnographic studies been conducted in the last few years, in your country, on the nature of teacher education programmes (pre-service, in-service, induction, etc)?

2. Are any ethnographic studies of teacher education being planned in your country? If so, please give brief details of two or three.

C. SUGGESTIONS FOR FUTURE ACTIVITIES

The purpose of the final section is to obtain information about the directions that should be taken by future activities developments in teacher education (e.g., in continuing education, staff development, in-service, etc.), as well as suggestions for future investigations of teacher education.

*Please comment in about 300 words, on the kinds of things that should be done or investigated.

* Descriptive or comparative sociological-type studies of the complex and diverse relationships (human and other) in educational settings. These studies would include those referred to in Section I part 2, "Rationale and Conceptual Framework", of the design statement.

LIST OF SELECTED APEID PUBLICATIONS RELATING TO TRAINING OF EDUCATIONAL PERSONNEL

Learning needs and problems in primary education; report. 1983.

Vol. 1 : Research issues and proposals
Vol. 2 : Training of educational personnel

In-service primary education in Asia; report. 1982.

Training of personnel for distance education; report. 1984.

Training educational personnel for integrated curriculum; report. 1984.

Research to improve teaching/learning practices; report. 1984.

Distance education: exemplar training materials. 1984.

Social and technological interaction with education – redesigning structures and preparing personnel; Occasional Paper No. 13 by Phillip Hughes. 1984.

Distance learning systems and structures – training of distance educators; report. 1985.

Professional development of educational personnel; report. 1985.

* *Training of educational personnel focused on girls and women; report. 1985.*

Mutual co-operation for schools development: some experiences from Asia and the Pacific; report. 1985.

Training of science teachers and teacher educators; report. 1985.

Interface between education and state policy: redesigning teacher education policies in the context of a preferable future – Republic of Korea (Education and Polity 3). 1985.

Building multidisciplinary training networks for rural development; report. 1986.

Teacher development for better pupil achievement. 1986.

School based in-service training: a handbook. 1986.

Operational teacher training objectives and raising achievement levels: a monograph. 1986

Teachers and their use of educational technology; report. 1986.

Distance learning systems and structures: training manual, Vol. II. 1987.

In-service training and to-morrow's primary education; report. 1987.

Coping with drop-out: a handbook. 1987.

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* Out of stock

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